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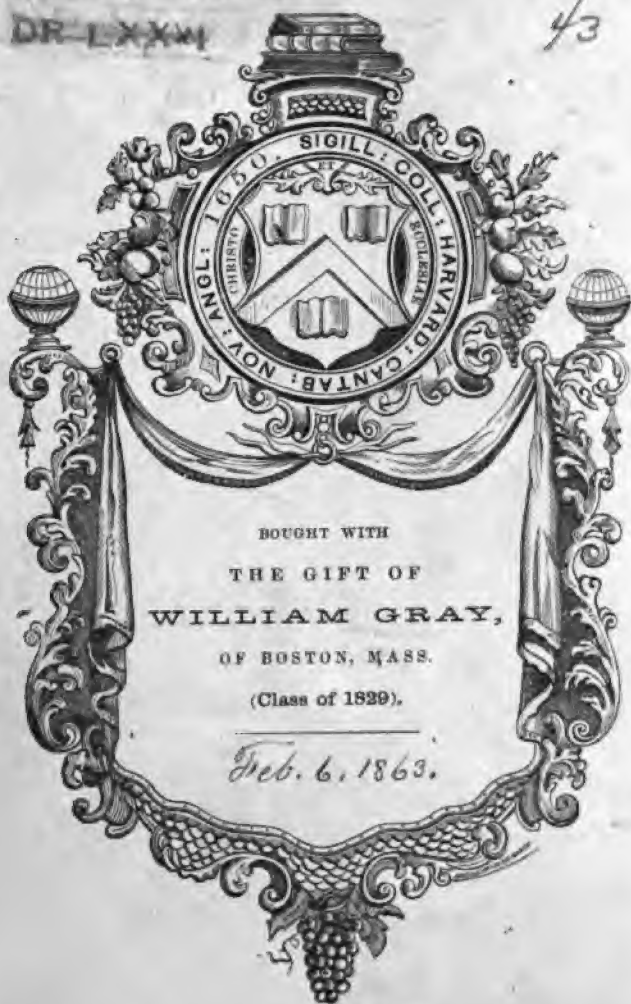
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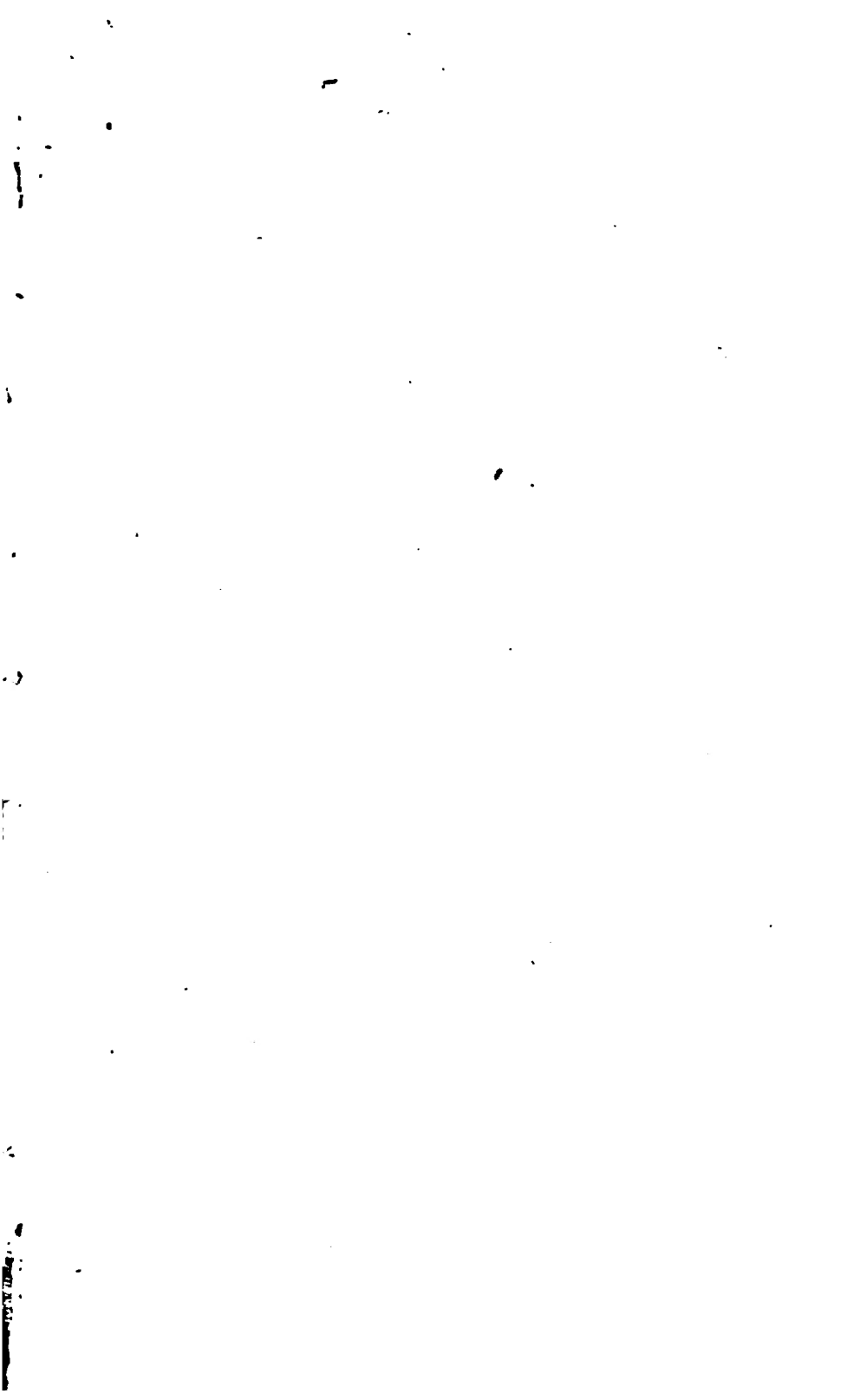
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23 Aug. 1863.

~~1863~~
DR LXXVI

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MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

Isaac

EDITED BY

I. SMITH HOMANS, (SECRETARY OF THE CHAMBER OF COMMERCE OF THE STATE OF NEW-YORK,)

AND WILLIAM B. DANA.

VOLUME FORTY-FOURTH,

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ALPHABETICAL INDEX

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VOLUME XLIV.

FROM JANUARY TO JUNE, 1861, BOTH INCLUSIVE.

EDITED BY I. SMITH HOMANS, (SECRETARY OF THE CHAMBER OF COMMERCE OF THE STATE OF NEW-YORK,) AND WILLIAM B. DANA.

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AND

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HUNT'S MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

JANUARY, 1861.

Art. I.—COMMERCE OF THE PRAIRIES.

THERE have been heretofore from time to time published in this Magazine, articles upon the extent of the commerce of the great Western prairies. The following is an interesting account of its present magnitude, for which we are mainly indebted to the New York *Herald* :—

Already, in the latter part of the eighteenth century, straggling adventurers, in search of game and mercantile profit, are known to have crossed the Plains by following up the Platte and Missouri rivers to their respective headwaters. No written record has, however, transmitted their exploits to posterity. The first authentic and explicit account of journeys across the Plains are those of the exploring expeditions of Lewis and Clarke, and Major Z. M. Pike. In Pike's official report we find a brief sketch of the experience of what appears to have been the first white man that ever traversed the Plains with a stock of mercantile wares. It seems that in the spring of 1802, one Morrison, a merchant, residing in the old French town of Kaskaskia, in Southern Illinois, furnished a French Canadian by the name of Lalande with a trading outfit, which he desired him to dispose on joint account among the Indians of the South Platte Valley. Lalande set out, and reached the base of the mountains in safety. On hearing from the Indians of the wealth and populousness of the valley of the Rio Grande, he made for New Mexico, where he disposed of his goods at so great a profit that he forgot to return and divide it with his employer. He settled, lived, and died in New Mexico, after accumulating considerable wealth.

Major Pike also refers to the adventures of one James Purley, who, solitary and alone, found his way, with a limited supply of articles of trade, into the Mexican possessions, after extensive wanderings on the Plains.

Upon the return of Major Pike to the Missouri River, his description of the agricultural and mineral resources of Northern Mexico produced a great excitement among the people of the border. Some of the fron-

tier traders soon resolved to try their fortunes in the far-off land of promise. Being inured to the many hardships and privations incidental to border life, the prospect of a hazardous journey of many hundreds of miles through entirely unknown and desolate regions had no terrors for them. In the spring of 1812, an expedition actually embarked from the vicinity of the present Missouri town of Boonville, under the charge of one McKnight, Beard, Chambers, and nine others, all of whom were old and experienced Indian traders. Their trip across the Plains was accomplished without accident. Sore disappointment was nevertheless in store for them. While Major Pike visited New Mexico, a friendly government—the fruit of a temporarily successful attempt at revolution and independence from old Spain—ruled over that country. Shortly after his departure, the royalists had, however, again gained the ascendancy, and managed to retain it up to the time of the arrival of the Missouri traders. The old Spanish prohibition of all foreign commercial intercourse had again been revived, in consequence of which the Anglo-American intruders were swooped upon by government officials as soon as they had crossed the line, their wares confiscated, and they themselves arrested and thrust into a Chihuahua dungeon, in which they had to pine for eight whole years. Their liberation was, indeed, not effected until the final overthrow of Spanish tyranny in 1820.

The news of the sad fate of the unlucky twelve duly reached the Anglo-American border, and at once banished all thoughts of opening a regular trade with the Spanish dependencies. Only after the establishment of Mexican independence, in the summer of 1821, the attempt was renewed by a certain Capt. Becknell and four others, also Missouri traders. They took out a small stock of calicoes, and were quite successful, realizing from \$2 a \$3 per vara or Spanish yard of thirty-three inches. Their good fortune becoming known after their return in the spring of 1822, quite a number of parties at once concluded to engage in similar expeditions. From the year of 1822, indeed, the now so important New Mexico or Santa Fé trade may be said to have fairly commenced. Among those that set out in that year were a Colonel Cooper and sons, who started with \$5,600 worth of goods and a company of thirty men.

In 1823, Nathaniel Sernes, Philip Thompson, Patrick M. Dillon, Wil, son McGunnegie, the Soublettes, and many other well-known parties who were closely identified with the early commerce of the country west of St. Louis, interested themselves in the newly-opened overland traffic. Thenceforth not a season elapsed without a more or less considerable export of merchandise from the Missouri River to the many towns and pueblos along the Upper Rio Grande. In 1825, the trade had already attracted so much attention as to secure the survey of a government wagon road from the Missouri to the New Mexico line, under the auspices of Major Sibley.

Up to 1824 the goods were all transported across on pack animals. In the summer of that year, however, vehicles began to be used, and soon superseded all other means of conveyance.

Although the trade increased annually, its normal development was greatly retarded by the many drawbacks those engaged in it had constantly to encounter. There were, in the first place—in addition to the natural difficulties of moving slowly through an unpeopled country, a portion of which was destitute of timber and even water—numerous

bands of marauding Indians, always eager to waylay the traders, stampede off their draught animals, plunder and burn their wagons, and not unfrequently appropriate their scalps. The aboriginal depredations soon became so incessant after yearly trips had begun to be regularly made, that none of the traders dared sally out alone, their several trains in those early days being but small. They brought about a general annual rendezvous at what was then, and is now, known as the Council Grove, a well-timbered and well-watered spot, about 112 miles west of the Missouri River. The press of the whole Union was, at that time, in the habit of noticing the departure and return of the *Sante Fé* caravan to and from the "Grove." It comprised, at times, hundreds of men and wagons, and thousands of horses, mules, and oxen. Yet, in spite of this union of forces, a trip was hardly ever made without the loss of both men and animals.

But the aborigines were not the only source of trouble. The innate lawlessness of the mixed races inhabiting New Mexico was often demonstrated to the American traders in the most flagrant manner.

Bands of native robbers and assassins often plundered and murdered them as relentlessly as the Indians, and with equal impunity.

Another obstruction to the uniform success of the trading expeditions was the notorious boundless rapacity of the Mexican government officers. From the governor down to the lowest *alcalde*, their only object appeared to be to enrich themselves. The advent of the American merchants proved most propitious to their pilfering schemes. The customs being arbitrarily arranged by the governors, the steadily increasing imports of foreign goods were soon found a most ample means of filling their own coffers, and those of their subordinates. The most exorbitant duties were formally levied, in order to induce the traders to resort to bribery to avoid their payment. The ignorance of the officials was too great to render the imposition of specific duties possible. They were charged per wagon loads, from five hundred to one thousand dollars being levied on each. This enormous tax compelled importers to make use of trickery. When within a short distance of the hiding place of the custom-house harpies, they would pile the load of two wagons on one, and thus cheat the former.

An idea of the extent of the New Mexico trade during its years of infancy may be formed from the following tabular statement, showing the weight of imported merchandise, and the number of men and conveyances annually employed in transporting it across the Plains during the years of 1822-31:—

Years.	Merchandise, lbs.	Proprietors.	Men with caravans.	Wagons. not in use.
1822.....	15,000	60	70	"
1823.....	12,000	80	50	"
1824.....	35,000	80	100	26
1825.....	65,000	90	130	37
1826.....	150,000	..	200	100
1829.....	60,000	20	50	30
1831.	250,000	80	320	130

The murder of a large number of the freighters in 1828 caused the falling off of 1829, and the escort of the caravan of that year by a detachment of United States troops.

The pack animals used during the first years were mostly mules. From

1826, nothing but wagons, drawn by mules, were used for transportation purposes, until 1829, in which year Major Riley, in command of the escort, first tried the capacities of oxen as propelling powers on the Plains. His example was speedily followed by the traders, and the bicorned quadrupeds have ever since remained the principal means of prairie navigation.

By degrees the importations by individual traders grew so heavy as to render protracted sojourns in the country necessary. Stationary marts were opened in Santa Fé, Los Vegas, Albuquerque, Taos, and other towns. Among the earliest of these that made permanent locations were Dr. Henry Connelly, (who has continued the leading New Mexico merchant up to this day,) Dr. Ward, J. B. Doyle, Col. McCarty, Messrs. White, Giddings, Bent, Smith, Jackson, the Soublettes, and St. Vrain, all of whom hailed from Western Missouri or St. Louis and vicinity.

In 1841, nearly three hundred wagon loads of goods left the Missouri River for New Mexico. But the flourishing condition the overland traffic had then already reached, was seriously interrupted soon afterwards by the famous warlike incursion of Texan Rangers into Mexican territory. Texas then being yet independent, its inhabitants could well war upon the Mexicans without directly involving the United States. But the sins of the former were, nevertheless, sorely avenged upon the latter. A decree of Santa Anna, prohibiting all importations of foreign goods as a measure of retaliation, virtually stopped the overland trade for the time being. Whatever goods reached New Mexico from the United States after that, up to its conquest by Gen. Kearney in 1846-7, were brought to the country in a clandestine manner.

Many and intolerable were the annoyances and persecutions inflicted upon resident Anglo-American traders by the natives, in consequence of the outbreak of hostilities in 1845 between Mexico and the United States. The appearance of Gen. Kearney and his army, in the fall of the following year, secured, however, an at least temporary relief; but great was the disaster brought upon many of the foreign merchants by the counterpart of the Sicilian Vespers the New Mexicans attempted in the succeeding month of January. Quite a number were massacred in the most barbarous manner. The utter rout of the insurrectionists in the battle of Taos, in February, however, restored quietude and comparative security to commerce.

After the conclusion of the treaty of Guadalupe, and the transfer of New Mexico to the United States, the commercial relations of the two countries were at once strengthened and widened. The military occupancy of the newly-acquired territory by United States troops greatly increased the safety of both property and person, and soon multiplied the capital and the number of merchants engaged in the importation of Anglo-American wares. Hundreds of wagons no longer sufficed to meet the increased demand; thousands now composed the caravans. The whole of New Mexico, from Taos down to El Paso, became dotted with trading houses, many of which branched out into Chihuahua and what is now known as Arizona. An account of the peculiarities of the New Mexico trade, and a statistical expositions of its present proportions, will be found further below.

While Anglo-American commerce gained and developed a new domain in Mexican territory, the great Plains themselves became the field of

many and continued mercantile enterprises. A most lively trade sprang up between the border settlements and the various Indian tribes from the northern line of Texas up to the northernmost waters of the Missouri. On the Arkansas, as well as the Kaw, North and South Platte, the Missouri, and Yellow Stone, trading posts were established, from which extensive bartering was annually carried on with the aborigines. On the Upper Arkansas, especially, the trading intercourse was very active from an early day, the adjoining country forming the route over which the Santa Fé caravans passed every summer and fall. In 1814, already Fort Williams, now known as Bent's Old Fort, was erected, and became the trading point for most of the tribes that wander between the Plains and Arkansas. Fort St. Vrain, on the South Platte, and forts Pierre and Benton, on the Upper Missouri, also became famous Indian marts. Strange as it may seem, the Indian trade was nowhere benefited by the seeming protection of the cordon of military posts that was gradually stretched across the Plains. The presence of troops appeared but to excite, and not to prevent, troubles. With the steady advance of frontier settlements, and consequent narrowing of the aboriginal hunting grounds, the Indian trade proper of the great Plains continually lessens. The government subsidies now furnished to nearly all the tribes also produced a corresponding decrease. It will doubtless disappear altogether in the course of time as a distinct branch of commerce, as the circle of civilization will be drawn closer and closer around the aborigines.

A new phase of the overland traffic was inaugurated by the foundation of the Mormon realm in the heart of Utah Territory. The several St. Louis firms who had been in the habit of supplying the wants of the Latter Day Saints in Missouri, Illinois, and Iowa, followed in the wake of their customers with branch establishments. Up to the beginning of this decennium, but little encouragement was, however, offered to merchants by the Salt Lake trade, owing to the straits experienced by the colonists during the first years after their settlement. But from that time up to the beginning of the troubles with the Gentiles, trade was very brisk and profitable. A large number of trains, comprising many hundreds of wagons, were every spring sent out from the Missouri River, and both the demand and supply grew heavier as the Mormon population increased. From season to season the mercantile interests and overland carrying trade of Utah expanded, and hundreds of both Mormons and Gentiles realized fortunes. The Utah trade suffered far less from Indian depredations than the New Mexican, owing to the annual movement of numerous Mormon emigrant trains over the route traveled by the freight trains, and the strong military occupation of various points along it. The transportation business to Utah attained its height during the so-called Mormon war. The presence of several thousand troops, all of whom had to be supplied with every requisite of physical life from the East, necessitated overland freighting, under the auspices of the War Department, on a truly stupendous scale. The contractors had no less than five thousand men, three thousand wagons, and thirty-five thousand mules and oxen, at work during the spring of 1858. Private freighting was also much larger during the summer of the same year, as many commercial speculators expected to turn the many wants of the army that were not met by the government to the best possible advantage. From 1858 a reaction took place, however, in the commercial relations of the Mor-

mon empire. The partial failure of crops impoverished many of Brigham Young's flock. The animosity between the Mormons and Gentiles affected the business affairs of many merchants of the latter complexion. Mormon traders more and more monopolized trade. A senseless overstocking of the market in the course of 1858 and 1859 also produced a ruinous competition; in fine, the profits of most Salt Lake traders became exceedingly scanty. Of late several very disastrous failures have even occurred, and trade was at so low an ebb during the past summer that several of the largest dealers moved their stock out of the country—a last and desperate resort, the cost of transportation being the all but principal item of expense in the overland traffic. Exclusive of government freight, not over a hundred and fifty wagons with merchandise left the border for Utah this year, so large are the stocks yet remaining on hand.

The most powerful stimulus received by the commerce of the great Plains, was the verification, in 1858 and 1859, of the momentous fact of the existence of large and individually paying deposits of precious metals in the southern ranges of the Rocky Mountains. During the heedless, irregular rush of men and matters that signalized the first stages of the Pike's Peak gold fever in the first half of 1859, nothing like a systematic trade was carried on. In the fall of the same year, however, when material life had assumed a more settled aspect, and the certainty of the permanent settlement of a populous mining community in the newly-discovered Dorado could no longer be doubted, commerce commenced flowing through regular channels.

Many of the leading merchants of Leavenworth City, Atchison, St. Joseph, Nebraska City, Omaha, and Council Bluffs fitted out large trains, loaded with heavy stocks of goods, and opened branch stores in Denver City, which place they soon created into a sort of commercial entrepot for the supply of the necessities of the mining population. The extent of the Pike's Peak trade at that time may be best judged from the fact that over six thousand people spent the last winter in the gold region, every material want of whom had to be supplied from the States.

But active as the commercial intercourse between the Rocky Mountains and the border States was during the latter part of 1859, it was multiplied at a marvelous rate in the course of the present year. The new grass had hardly commenced sprouting when an impatient host, eager to pounce upon the supposed mineral treasures of the mountains, undertook the pilgrimage across. For weeks a mighty human tide kept rolling in unbroken waves over both the Southern, or Arkansas, and Northern, or Platte, routes, towards their golden goal in the South Platte region. From the middle of April until late in June a continuous string of wagons was stretched over the road leading from the different Missouri River towns to the base of the mountains. At least sixty thousand people moved in that period, with their goods and chattels, over the Plains. All these tens of thousands had to be fed, clothed, and lodged, and hence hundreds of regular freight wagons were going to and fro all summer, in order to enable the Pike's Peak traders, not only to meet the momentary wants of the population of the land of gold, but also to lay in stocks sufficient to see them through the winter, during which the overland freighting inevitably ceases.

A very consequential agent in the development of the commerce of the

Plains proved the three overland mail, passenger, and express routes opened during the last five years, viz., the Southern overland mail and passenger route from St. Louis, via Fort Smith, through Northern Texas and Southern New Mexico and Arizona; the New Mexican mail and passenger line, from Independence, Missouri, to Santa Fé; and the two express and passenger lines of the Central Overland California and Pike's Peak Express Company to Denver and Salt Lake cities. Formerly the New Mexico and Salt Lake traders were obliged to travel with their trains, when making their purchasing trips to the East. Their correspondence had also to be forwarded in the same slow manner. During the winter, communication with the States was, for the same reason, absolutely closed. Now, both their persons and letters are landed on the borders in as many days as they formerly took weeks. Of late, a mail and passenger line has also been started by the Western Stage Company, between Omaha, N. T., and Denver City, so that there is now a daily opportunity to cross the Plains from the Missouri River to the gold fields of the Rocky Mountains over passenger lines, whose coaches travel at the rate of 150 miles per day.

THE CENTERS OF THE DIFFERENT BRANCHES OF THE OVERLAND TRAFFIC.

To begin again with the New Mexico trade. In its infancy the traders started upon their annual trips, as already related, from the vicinity of the present Missouri town of Boonville. Even those residents of St. Louis who joined the early expeditions, came up the river with their goods in so-called Mackinaw boats, and stopped at the same point. The town of Independence was, however, founded soon after the beginning of the trade, and speedily became the great outfitting center of the overland traffic. It held this commercial ascendancy from 1832 to 1838, during which period it commanded all but a small fraction of the profits arising from the New Mexican trade. Its merchants accumulated vast fortunes, and their prosperity brought about the development of Independence into one of the most flourishing and beautiful towns in the West. But "westward is the course of empire." Independence held its own as long as it remained without more westerly rivals. The birth and growth of Westport and Kansas City, directly west of it, caused the scepter of monopoly to slip from its hands. Already, in 1834, Messrs. Bent and St. Vrain landed a stock of goods for the New Mexico market at Francois Choateau's log warehouse, just east of the present site of Kansas City, and from that time the transfers of the New Mexican trade from Independence to its two immediate western neighbors took place in annually enlarging proportions. Since 1850, nearly all of it has passed over to them. But few wagons are now sent out from Independence to New Mexico during the shipping season.

Of the two successful competitors, Kansas City has now the largest benefit from the trade. Its accessibility and direct water communication with Eastern markets have made it the point at which not only a large portion of the goods yearly forwarded is sold, but also nearly all those bought farther east are disembarked, stored, and reshipped on overland trains. Westport, which is only three miles southwest of it, likewise enjoys a considerable share of the trade. Being situated directly on the verge of the Kansas prairies, it offers greater inducements as a mere starting point than Kansas City; but for receiving and buying, the preferences are decidedly in favor of Kansas City.

Although a considerable portion of the goods annually exported to New Mexico is bought in Kansas City and Westport, the bulk of the yearly purchases is made in St. Louis. Few only of the largest traders make direct purchases in the Atlantic cities.

The Indian trade centers mostly in St. Louis, and is controlled to a large extent by the aforementioned firms of that city. Both the New Mexican and Indian traders are very steady customers. Their relations to the wholesale houses with which they deal are generally of so old and intimate a character that a change hardly ever takes place. The furnishing of the Indian goods bought by the United States government for gratuitous distribution, being annually given out under contract to the lowest bidders, it cannot well remain concentrated at any particular point. The transportation to the different Indian agencies on the Plains is also undertaken by contractors, and hence no habitual shipping point exists. Most of these goods are, however, landed and loaded at Kansas City.

The Utah trade has sought the more northwesterly Missouri River towns as starting and outfitting points. Most of the supplies for that market are brought up the river on boats to Omaha and Florence, where they are transferred to trains. The latter town especially has been the favorite point of embarkation of the Mormon trade and emigrants. Large outfitting houses for the particular benefit of the latter have been established, and the greater portion of the Salt Lake carrying trade is done here. The government supplies for the military posts on the route to and in the Territory of Utah are, however, loaded by the contractors at Fort Leavenworth and Atchison.

The Salt Lake traders buy their goods in St. Louis, Philadelphia, New York, and Boston. They patronize only a small number of houses. The Latter Day Saints among them are very particular to deal only with such Gentiles as, from long acquaintances, are known to them to be friends of the Mormon cause.

The least concentrated branch of the overland commerce is the Pike's Peak trade. There is not a place on the Missouri River that, however small, is not represented among the traders of the gold regions. But Leavenworth City can claim to do more business in that direction than any other town, from Florence down to Kansas City. The reason of it is, that all her merchants have branch stores in Denver City, and that two of the largest overland transportation firms are located in the place. Atchison and St. Joseph rank next, being the westernmost railroad termini of the Union. They have both become the most favored starting points of the gold seekers. In this they have a considerable start of Leavenworth. Their railroad advantages have also made them much sought for loading trains. As far as trade itself, however, is concerned, they still have to yield the palm to Leavenworth, although many of their merchants have likewise a profitable business intercourse with the mines. Kansas City has traded remarkably little with the Pike's Peak country. This is probably owing to the absorption of its carrying capacities by the New Mexico trade. Nebraska City is much resorted to by Pike's Peak-ers, as a convenient starting point, and has also some trade with the gold regions. The same can be said of Plattsmouth. Omaha City and Council Bluffs enjoy extensive and profitable trade and lively traveling intercourse with the mines, both being nearest to them of all Missouri River towns and cities.

Leavenworth City, Atchison, and St. Joseph are all three termini of the passenger and express line of the Central Overland California and Pike's Peak Express Company. Omaha is that of the mail and passenger line of the Western Stage Company. Kansas City is as yet without direct communication with Denver City.

CHARACTERISTICS OF THE OVERLAND TRADE.

The wants of a country are always regulated by the means of its people to satisfy them. The New Mexicans, although inhabiting a region of great agricultural, mineral, and pastoral resources, cannot be said to be a wealthy people. It is true there are men of fortune among them, but this number appears insignificant when compared with that of the people at large. The average well being that one finds among all classes in the United States does not prevail in New Mexico, where the means of the people barely suffice to eke out a most frugal subsistence.

Fortunately for the generality of the New Mexican, the smallness of their means is compensated by a simplicity of physical habits that enables them to manifest content and happiness in spite of poverty. It would be hard, indeed, to find a relatively poorer, and at the same time happier, people than that of New Mexico. It can certainly live on much less, and enjoy much more, than Anglo-Americans.

The New Mexicans devote comparatively more of their means to the outward than to the inward body. They are fond of spirituous beverages, but not particular about the character of their food. They know little of the so-called pleasures of the table. Their dress, however, is the object of great care and expense. Both males and females delight in showy adornments of their persons, and this propensity shapes the character of the trade to a great degree.

In the early days of the foreign traffic with New Mexico, when the wants of the natives had not yet been qualified by a contact with Anglo-American habits and customs, the variety of imported goods was rather limited. Groceries and flash calicoes constituted the main stock. The gaudier the colors of the latter, the better favor they found. A buff-colored kind was especially popular. As the intercourse between New Mexico and the East grew more intimate, the goods introduced from year to year became more varied, and now very few articles that merchants in the Western States keep on hand will not be found in the assortment taken out by the New Mexican traders.

There are, however, some peculiarities in their importations. They consist in an uncommonly large demand for calicoes, bleached domestics, and hosiery, particularly for female use. The number of white stockings bought by the Mexican women is said to be astonishing. The diminutive character of their pedal extremities renders a prevalence of small sizes necessary. For the same reason, dealers in shoes that do business with New Mexico traders, have articles in this line expressly made to meet the tiny requirements of the *senoritas* in this respect.

Fancy dry goods are introduced on a limited scale only, the few people of wealth being the purchasers. What few are imported are, however, usually articles of a very costly quality.

Of late large quantities of ready-made clothing and furnishing goods have been consumed by the New Mexican market, thereby indicating that the old Spanish notions of dress are giving way to the Anglo-American style of garments.

The settlement of many Americans in New Mexico has for some time induced the annual import of considerable quantities of Eastern flour into that Territory. It is true the amount of breadstuffs ordinarily raised in the valley of the Rio Grande is sufficient for the home demand. But the primitive mode of working up the wheat into flour, still adhered to by the natives, makes it incompatible with Anglo-American stomachs. The foreign flour is, of course, held much higher than the domestic.

Pork in its various forms, such as bacon, hams, &c., also constitutes a leading article of import.

In former years the exports made from New Mexico, in exchange for Anglo-American goods, were principally gold and silver coin and bullion and mules. The latter branch has at this time all but dwindled away, owing to the extensive mule breeding in several of the Western States. The exports of precious metals have also greatly decreased during the last few years. The cause of the diminution is the paralysis, from various causes, of silver and gold mining throughout the Territory. The surplus of both coin and bullion has been carried off by the steady draft for the purposes of commerce, and the balance now extant in the Territory is barely adequate to the wants of the inhabitants. Eastern payments, which but a short time since were wholly made by consignments of coined and other silver and gold, are now made by the New Mexico merchants through drafts on the sub-treasurers of the United States, obtained from the military and civil officers stationed in the Territory.

The falling off in the export of the enumerated articles has been made up by an increase in that of others. Thus, the exportation of wool has above all been carried on very largely during the last five years. In 1859, nearly nine hundred thousand pounds arrived on the Missouri River from New Mexico, and this year's shipments are expected to exceed one million. The excellent natural pasturage of the Territory is likely to make sheep breeding one of the principal native pursuits, and steadily swell the yearly wool clip.

Mexican wool is worth about 14 cents per pound on the Missouri River. Its export largely benefits the transportation houses that do freighting for New Mexico traders, inasmuch as it secures return loads to them—an advantage not enjoyed by the overland freighters to any other portion of the country west of the great Plains. The freight is from four to five cents per pound.

Goat and sheep skins also constitute an already important article of export. Some thirty thousand, worth about twenty-five cents each, were brought in last year; also some dry hides, tallow, and a variety of furs.

The value of the merchandise taken into New Mexico this year is estimated by competent judges at about two millions of dollars. On this investment a profit of about forty per cent is realized. In past years traders were not satisfied with less than from one to four hundred per cent. Competition has now cut down the enormous exactions of yore. The number of Anglo-American traders, large and small ones, is about two hundred and seventy at the present time.

But a comparatively small number of native Mexicans are engaged in merchandising. The leading houses among them are several of the Armijo family, perhaps the wealthiest in New Mexico; Perea & Co. and Joseph Mercure, all of whom are located in Santa Fé.

The value of the exports from the Territory during the present year is about \$400,000.

The above valuations of imports and exports do not represent all the capital invested in the New Mexico trade. In the transportation business, which it has created, millions are also employed, as will be shown under the appropriate head.

The Indian trade proper of the great Plains has, as remarked in a preceding portion of this article, fallen off, owing to the encroachments made by civilization upon that formerly undisputed dominion of the aborigines. The tens of thousands of half-civilized redskins, confined in so-called reserves in the Indian Territory and Eastern Kansas and Nebraska, have already learned too much to continue their former trading ways. Most of them have become familiar with the real value of mercantile wares, and, like their white neighbors, no longer limit their trading relations to certain places and parties, but trade wherever they can buy cheapest. Most of the permanently located tribes receive provisions, groceries, clothing, blankets, farming utensils, &c., from the government, as a portion of their annuities, which supplies naturally limit their purchases. Yet, after all, even the civilized Indian is an incorrigible spendthrift, and generally squanders his means in the most foolish and reckless manner. As soon as he receives his cash annuities, he mounts his pony and is off to trade. Once about buying, Uncle Sam's eagles do not jingle long in his pocket. He is not satisfied until his last dollar is spent, and even after that is gone he will persist in buying, in case the merchant is willing to trust him until next pay day. Of the million and a half of dollars now annually distributed among the Indians settled on the border, most find their way into the tills of the frontier merchants.

The wares mostly in demand among the savages are arms, powder, lead, tobacco, sugar, coffee, candles, beads, calicoes, blankets, saddles, bridles, ribbons, and trinkets of every description. Flour and bacon are also readily disposed of, as agriculture is attempted on the smallest scale only by a few of the wild tribes. In exchange, the traders receive gold and silver, furs, dressed skins, beaded Indian garments, dried meats, ponies—in short, anything of commercial currency the aborigines are willing to part with; and what is an Indian unwilling to give when an article pleases his primitive taste? Papooses and squaws are then as unhesitatingly bartered away as moccasins and buffalo robes.

The profits of the traders are enormous. A few pounds of flour or sugar are given for the most valuable furs. Rings, that cost a few cents in the East, bring as many dollars. Bacon is usually made to bring about half a dollar per pound, and all other articles are held at corresponding rates.

The quantity of furs and dressed deer, elk, and antelope skins exchanged for goods by the traders is very great. Of the furs, buffalo robes constitute the bulk. The furs and skins obtained from the Indians of the Plains, nearly all find their way through various channels to St. Louis. Those from the Upper Missouri country are brought down that river every summer by the so-called "mountain fleet" of light draught steamboats, and those from the Platte, Kansas, Arkansas, Colorado, and Grande valleys by returning freight trains. The annual value of these exports is, of course, not uniform. It usually represents several hundred thousands of dollars.

Some of the Indian traders have stationary posts. Others lead a wandering life, visiting tribe after tribe. To the former class belong the wealthiest of the profession.

While many merchants, interested in the commerce of the Platte, trade exclusively with the Indians, a number of those located in New Mexico, Pike's Peak, and Salt Lake, likewise dispose of more or less goods among them.

The Salt Lake trade, although more varied than that with the aborigines, is far less profitable. It is true imported wares always bring good prices when sold; but the heavy cost of freighting, the interest on the capital invested lost during the long time consumed by the overland transportation, &c., necessitates these, while the constant overstocking the Utah market has labored under during the last year rendered quick sales impossible. The Mormons, furthermore, are not a well-to-do people. Their means are so limited that, even if they desired, they could not well become extravagant purchasers. They dress and live poorly. The comforts and luxuries of Eastern life are known to but few of them.

Cheap dry goods and clothing, boots and shoes, groceries and liquors, and hardware, constitute the bulk of the imports into Utah. Of provisions, all that are wanted for home consumption, with the exception of pork, are produced in the Territory. Of wheat, a surplus has been raised more latterly, for which a market has been found this summer in the Pike's Peak settlements. But flour and some furs and skins are about the only articles exported from Mormondom. A manufacturing interest is gradually growing up among Young's people that promises to cause, before long, a still farther decrease in the importation of certain Eastern goods.

It is doubtful whether the value of the imports of 1860 exceed half a million of dollars.

The dimensions of the newly opened overland trade to the gold and silver mines of the eastern and western declines of the Rocky Mountains eclipse altogether those of the New Mexico, Indian, and Utah trade. It is already characterized by all the energy and enterprise of Anglo-American business life. Having to do with greater consumers, it is far ahead, both as to quantity and quality of imports. The truth that there are no better buyers anywhere on the globe than Anglo-Americans, is amply illustrated by the rapid and stupendous development of Pike's Peak commerce. They will enjoy all the bodily and intellectual well being they have been brought up to, no matter how difficult and expensive it may prove to secure it. Nor has the knowledge of this ingrained propensity, always to live as well as possible, failed to be duly acted upon by those that undertook to provide commercially for the various wants of the tens of thousands that so speedily congregated in the Dorado of the Rocky Mountains. Although hardly two years have elapsed since the first gold hunters made their appearance at their base, money will now buy not only all direct necessities, but most of the comforts of Anglo-American life. In Denver City whole streets have been built up in less than twelve months with brick and frame edifices for business purposes, many stories high, and filled from roof to cellar with every production of Anglo-American industry that can possibly be demanded in that market. On the 1st of August last, goods, the first cost of which was over a million and a half of dollars, and whose real value, as retailed, represented at least four millions, were stored in that place alone, while in all the other towns of the gold regions, and throughout the mines, immense quantities of wares, imported directly from the States to the several localities, were likewise offered for sale.

That trade in the Pike's Peak country was at once conducted on so broad a basis is doubtless attributable, in some degree, to the fact that thus far the recently invaded land of gold has, barring the yield of gold and a crop of vegetables, remained an absolutely unproductive country. Every pound of breadstuffs had to be imported, which necessity alone at once called a huge transportation business and provision trade into existence. Over one hundred and sixty thousand sacks of flour have indeed been hauled to the gold regions since the 1st of April last from the Missouri River towns, New Mexico, and Utah, which retail on an average at \$12 per sack. The importations of groceries are equally enormous. These two branches form, in fact, the bulk of the Pike's Peak trade.

Although the Pike's Peak market is well stocked with every kind and grade of goods, all are not in good demand. Groceries, provisions, boots and shoes, clothing, cheap dry goods, building hardware, tobacco, liquors, saddlery, glass, and some few other articles have always sold well, while fancy dry goods, fine clothing, furnishing goods, costly furniture, and such like, were not very eagerly sought, nor will they be until the general anxiety to make money will have given way to a stronger disposition to enjoy it.

The above enumerated staple articles bring very satisfactory profits, although they are necessarily held high, because of the expensive overland transportation of nearly 700 miles.

It is estimated that, the winter stocks having now nearly all been imported, about two millions and five hundred thousand dollars' worth of merchandise has been carried to the gold regions from various points since the 1st of April last, all of which are expected to be sold previous to the return of the warm season at a profit of at least two millions. The cost of the machinery introduced in the towns and mines cannot be less than one million of dollars. To all this must be added the capital absorbed by the gigantic carrying trade, created by these mercantile and industrial wants. A series of facts and figures, bearing on this part of the subject, will follow further below.

The exports from the gold regions consist thus far of about three millions' worth of bullion and fifty thousand dollars' worth of furs and dressed skins.

Judging from present appearances, only one or two more seasons will elapse before the largest portion of the breadstuffs consumed by the Pike's Peak people will be produced in the South Platte and Upper Arkansas valleys. That their climate is favorable to the production of all cereals has been fully demonstrated by experimental patches of wheat, barley, and oats raised this summer.

OVERLAND TRANSPORTATION—ANNUAL PREPARATIONS FOR THE CARRYING SEASON.

The navigation of the great prairies of the West is as much dependent upon meteorological contingencies as that of the sea, and even more so. For while seafarers can bid defiance to the whims of the weather, they that propose to steer across the Plains have no alternative but to abide by its caprices, however provoking that may be. Should an early triumph crown the yearly struggle between the cold and warm seasons, the overland freighter will take a corresponding timely start upon his wearisome journey. But if, as it frequently happens, winter succeeds in

maintaining its sway long after the period assigned to the rule of spring commences, he must, *volens volens*, continue in "port." The relative condition of the annual new growth of grass, regulated, as it is, by the more or less ready appearance of the season of herbal life, is the barometer that absolutely controls his movements. Wind and rain will not retard him. He will mind them no more than he that is tossed about on the uproarious ocean. Protracted frosts alone are terrors to him, as their unseasonable infliction always seriously interferes with the attiring of the Plains in their luxuriant summerly verdure.

But whether loathed delay or early embarkation be in store for the prairie travelers, their departure from their several winter quarters is always preceded by weeks of active preparations, so that they may be ready to start whenever the vegetation of the Plains is sufficiently resuscitated to warrant it.

The overland traders appear in the Eastern markets as the earliest among spring buyers, in order to have their invoices on the frontier at the time of the reopening of the transportation season. The hotel keepers and wholesale dealers of the Western cities know exactly the time when they may expect the yearly visits of those well dressed individuals, with deeply bronzed countenances, that come from the far West, with "pockets full and spirits easy." They loom up as unfailingly as the migratory birds that winter in southerly climes.

The old accounts being squared—although buying largely on credit they but seldom ask extensions—and the new purchases, mostly comprising stocks intended to last a whole season, being made, they seek the Missouri River towns to superintend the arrival, storage, and final shipment for the Plains of their several invoices.

Many of the freighters are in the habit of going into winter quarters on the western verge of the Plains, as the climatical relations of those regions render their natural pasturage more desirable during the cold season than that of more easterly latitudes. But whether they winter their stock and shelter their wagons in the glens and glades of the Rocky Mountains, and upon the table lands of the Upper Arkansas, Platte, and Grand rivers, or on the prairies and in the bottoms and groves of Western Missouri and Iowa, and Eastern Kansas and Nebraska, the month of March finds them all very busy in getting everything into the best possible order for the ensuing days of activity.

At that time their many starting points from Nebraska down to Missouri reveal a stir, noise, and bustle similar to that accompanying the vernal resumption of steamboating in the river cities of the West. Thousands of wagons that during the winter stood on elevations, in long rows, forming solid squares, and covering acres of ground, are now severally hauled forth, examined, and repaired. Wagon makers, blacksmiths, and saddlers are kept busy day and night. Thousands of draught animals are driven up from the prairies of the interior and herded on the outskirts of the towns. Crowds of teamsters, in dirty buckskin, corduroy, and flannel—tall, muscular Missourians, agile, talkative Frenchmen, and swarthy, sallow looking Mexicans—commence hanging about the street corners and groggeries. Towards the middle of June the public thoroughfares resound with the rumble of the clumsy, cumbersome, "prairie schooners," and the violent vociferations of drivers, that with loud cracks from mighty whips urge patient oxen and restive mules towards the warehouses on the levees, from which the cargoes

are to be procured. Wagon after wagon rolls up and receives its load and returns to the camping ground, (usually a few miles back of the towns, and convenient as to food, water, fuel,) until the train is completed. A few days are then devoted in camp to the last preparations for the trip. At last, the height attained by the new grass warranting a start, the order of march is given, and the caravan slowly emerges upon the seemingly boundless prairies it is to traverse.

ROUTES FOLLOWED BY FREIGHTERS TO NEW MEXICO, PIKE'S PEAK, AND UTAH.

The course pursued by overland freighters to the settled sections, both east and west of the Rocky Mountains, is no matter of choice. It is absolutely fixed by the necessity of having water, grass, and fuel steadily within reach. These three articles form, indeed, the conditions *sine qua non* of prairie traveling. All the highways of overland travel have been opened either in the immediate vicinity of water courses or as near to them as the character of the surface of the country would allow. Yet, although the greatest care was taken to make the several routes come up to the required standard, it was often found impracticable to trace them so as to place the temporary want of some of the above elements beyond all possibility.

The great Arkansas, or Santa Fé route—the first trail across the Plains ever followed by vehicles—is and has always been the sole channel through which all the carrying trade between New Mexico, the Indian trading posts of the Arkansas Valley, and the east passes. It begins on the Missouri line just west of the town of Westport, and, after bearing nearly due south for several metres, continues a little south of west at a gradually increasing distance from the Smoky Hill Fork of the Kansas River, through Council Grove, (115 miles from the Missouri,) towards the Arkansas, the great bend of which it reaches on its northern bank at about 250 miles from Kansas City. Keeping up the bend, the road crosses the river near Fort Atchison, and, bearing due southwest, runs to the Cimarron valley, which it follows up for a considerable distance. Crossing the Cimarron, and leaving it to the right, the road passes over to the valley of the Canadian River, crosses its head waters, and, after touching Fort Union, leads over one of the southern spurs of the Rocky Mountains into the Rio Grande Valley.

The entire distance from Westport to Santa Fé is about 750 miles, and is measured by freight trains in from forty to fifty days in going out, and in from thirty to forty in returning, provided no accidents interfere.

The road is broad—the wagon tracks extend hundreds of feet in width nearly all the way out—and tolerably smooth and dry, with the exception of some sandy stretches on the Cimarron River, and some heavy ascents just before passing into the Rio Grande Valley. Grass is plentiful and water likewise, barring the arid plains along the Cimarron and Canadian, the desert like character of which has brought many a fatal disaster upon New Mexico caravans.

The overland traffic with the Pike's Peak region is not, like that with New Mexico, confined to a single channel. It is finding its way both over the Southern or Santa Fé and Northern or Platte route. That portion of it that follows the former, instead of keeping the Santa Fé trail, after it turns off the Arkansas, continues up the northern bank of that river past the so-called Big-Timbers and Bent's Fort, to within a few miles of the base of the mountains, when, turning due north, it winds up to Boiling Spring Creek, a tributary of the Arkansas—to the town of Colorado at the base

of Pike's Peak, and seventy miles farther north reaches Denver City, after passing over the high ridge dividing the waters of the South Platte from those of the Arkansas.

The distance from the Missouri River, over the Arkansas route, to Colorado and Denver, is from 670 to 740 miles. Although it is the nearest way of reaching the southern mines and towns, and its excellence for the safe and speedy transit of freight trains is undeniable, but a small portion of the Pike's Peak trade has thus far availed itself of its advantages, and that simply because most of the importations into the land of gold are made from frontier towns north of Kansas City, the natural eastern outlet of the Santa Fé road, and that hence freighters find the Northern or Platte route shorter. The many Indian depredations committed during the last year along the Upper Arkansas, had also a good deal to do with directing the transportation business to the Platte Valley.

The Platte route has as many eastern ramifications as there are outfitting and starting points north of the Kansas River. They severally terminate in Leavenworth City, Atchison, and Elwood, (directly opposite St. Joseph, Missouri,) in Kansas; and Nebraska City, Plattsmouth, and Omaha City, in Nebraska Territory. Those from Leavenworth, Atchison, and Elwood, or St. Joseph, converge at a point only thirty miles west of the Missouri River; and the travel from the three points in question then keeps in common the old military road from Fort Leavenworth to Fort Kearney. It runs in a northwestern direction, across a goodly number of creeks and streams that water northeastern Kansas. At a distance of 100 miles it strikes and crosses the Big Blue—a considerable tributary of the Kaw River—and, passing over to the valley of the Little Blue, follows it up until within about fifty miles from Fort Kearney, when it takes a northerly turn over the divide of the waters of the Platte and Kansas, and reaches the Platte River and the road from Plattsmouth and Nebraska City some twelve miles this side of Fort Kearney. Another road, sometimes taken to the Platte River by freighters and emigrants from eastern Kansas, is the military road that connects Fort Leavenworth with Fort Kearney, by way of Fort Riley, there being little difference in the distance, which, between Leavenworth, Atchison, St. Joseph, and Kearney, ranges from 260 to 280 miles. The road is rather broken, but not bad when dry. In the spring rains often reduce it to an impassable condition, the heavy freight wagons cutting it up, and fordings become difficult and dangerous, owing to the often rabid and mighty rise of the water courses. During the annual height of overland migration, grass often becomes very scanty close to the road, in consequence of the constant grazing of vast numbers of draught animals. As to water, the worst stretch of the road is that from the head of the Little Blue to the Platte River, some forty odd miles, where during high summer water is found only in pools and buffalo holes.

The roads from Plattsmouth and Nebraska City join about thirty miles from the Missouri River. The road from these two places to Fort Kearney is certainly the best of all the eastern branches of the Platte route for freighting purposes. There is but one stream—Salt Creek—of any moment to cross, and that is paved at a shallow ford with solid rock. An abundance of grass, and wood, and water is also found all the way to Fort Kearney. The road is hard, dry, and nearly level for the greater part of the distance, and follows the Platte Valley the last hundred miles. From Nebraska City it is two hundred, and from Plattsmouth about fifteen miles less. The only

drawback to this route lies in the uncertainty of Missouri River navigation, and the consequent trouble experienced in getting freight from the East to the two eastern termini. This evil will soon be remedied by the completion of the Platte Valley Railroad, which is now being extended up the left bank of the Missouri from St. Joseph.

The road from Omaha City to Fort Kearney was first opened by the Mormon emigration nearly fourteen years ago. Its natural excellence is great, it being a broad trail, with gentle acclivities and easy fordings, and running over an undulating prairie country well wooded and watered. A telegraph line, now about completed, follows, and a daily stage line is also worked over it. But the northerly location of Omaha City, hundreds of miles from the terminus of any railroad, has thus far prevented its overland route from being largely used by the regular freighters, although it is by far the shortest (180 miles) to Fort Kearney and points farther west. It is much traveled, both by emigrants to Pike's Peak and California, and alone used by the annual Mormon expedition, whose proper starting point is, however, Florence, a town some three miles north of Omaha.

The old Mormon trail extends up the north bank of the Platte, after reaching the river opposite the Fort, and is uniformly followed by the handcart, ox and mule trains of the Latter Day Saints, as their leaders are always anxious to avoid intercourse with Gentile travelers, the bulk of whom keep up the south bank.

From Fort Kearney the carrying trade to the gold regions follows a common track—the great military road to Fort Laramie—up to the California or lower and upper crossings of the South Platte. A better natural road does not exist anywhere in the United States. With the exceptions of a few miles in the neighborhood of the forking of the main Platte into a north and south branch, it runs up through the river bottoms, the soil of which has a large admixture of sand and gravel—just enough to make it hard and free from the protracted effects of rains. Although a steady ascent takes place from the Missouri River to the base of the mountains, it is so gradual as to remain imperceptible on all the routes across the Plains, and nowhere more so than in the Platte valley. Not a single stream has to be forded between Kearney and the crossings—distance, from 160 to 190 miles from the former point.

Here the travel to the gold regions leaves the military road, which continues across the South to the North Platte, and leads up the former over an ancient Indian war path to the mouth of Beaver Creek, 107 miles west of the upper crossing. From this point travelers can either take a new cut off to Denver or follow the old track along the South Platte, past Fremont's Orchard to Fort St. Vrain, (an abandoned trading post,) and thence down the sudden southwesterly turn of the river to its junction with Cherry Creek, on both sides of which the metropolis of the gold regions extends. The distance over the former is 182, and over the latter 220, miles from the upper ford of the South Platte.

From within 30 miles of that point to within 40 of Denver, frequent deserts—at times only a few hundred yards and again many miles in width—intervene and badly obstruct the passage of all vehicles. The heavy freight wagons are always obliged to double team in order to get through its sand, which often lies several feet thick. A sandy belt seems to stretch over the entire length of the Plains, from the Upper Missouri

down to Northern Texas, between the 102d and 104th degrees of western longitude; at least, more or less deep sand prevails within those limits on all the routes.

Another common feature of the several overland routes is the utter absence of timber, commencing at about 100 degrees and 30 minutes west longitude, and extending to the west for from 150 to 200 miles. The *bois de vache*, or, less elegantly expressed, the dried buffalo dung, is the only fuel on those treeless, forsaken stretches.

During the last two years determined and continued efforts have been made by the people of Leavenworth City and other interested Kansas towns to attract freighters and emigrants to the so-called Smoky Hill route, a continuation of the military road to Fort Riley, up the fork of the Kansas River of like name. But although recent explorations have proved the possibility of opening a good route practically for the heaviest of freight wagons, and certainly more direct than that up the Platte through that valley, the very fact that it has not been traveled up to this time, and that not a human habitation is found on the last 400 miles of it, has damaged its prospects, and will continue to do so until the construction of the contemplated railroad from Leavenworth up the Kansas valley to Fort Riley shall have added an additional inducement for its more general adoption.

The Utah carrying trade passes over the eastern branches of the Platte route to their junction at Fort Kearney. Thence the great portion of it keeps up the south bank of the Platte to either of the crossings, after passing which it makes over the divide of the waters of the two forks of the river to its northern one, and then follows this to Fort Laramie. The Mormon element, as already mentioned, usually continues its westerly course up the north bank of the river to the same point. Both roads then join and run up the south bank of the north fork to the mouth of Deer Creek. At this point it crosses over to the north bank, which it keeps through the Rattlesnake Mountains until it strikes the Sweetwater. Following this through the South Pass, it changes its heretofore north-westerly to a southwesterly course, across Green, Black, and Bear Rivers to Fort Bridger, and thence to the different Mormon settlements. The length of the route ranges from 1,100 to 1,250 miles, according to the location of the starting points.

The road is good, save many sandy, barren spots on its western portion. The great number of fordings from the South Platte crossings all the way out likewise obstruct the progress of trains in rainy seasons. Wood is comparatively more plentiful than on both the routes to New Mexico and the Pike's Peak country.

Freighters to the gold regions have all made two trips during the present season, each of which occupied from sixty to seventy-five days. To Salt Lake, however, only one trip can be made each season. It is made in from one hundred to one hundred and thirty days.

The Indian trade is supplied both by carrying means of its own and the freighters to New Mexico, Pike's Peak, and Utah, the principal trading post being located in close proximity to the several routes to those regions. Those in the Upper Missouri country obtain their goods by water; hence are the most favored among the merchants of the Plains as to cheapness or expeditiousness of transportation.

The daily augmenting number of mail and express stations, United

States post-offices, trading houses, stock ranches, blacksmith shops, etc., on the route to Pike's Peak and Utah, has done away, to a great extent, with the helplessness experienced in former days by freighters and emigrants in case of accidents.

FREIGHTING LIFE ON THE GREAT PLAINS.

Life on the Plains differs as much from that in the settled sections of the West as the life of inland navigators from that of regular seafarers. There is indeed so much originality and freshness, so much of the romantic and adventurous, in the experience of those that annually make the great prairies the scene of their woes and joys, that the reader may not be ungrateful for the following description of its many interesting peculiarities.

The axiom that "in union there is strength" is strictly acted upon by the overland freighters. Considerations of mutual protection and assistance prevent them from sending out single wagons. They are always combined into trains comprising from a dozen to as many as seventy-five, and at times even a hundred vehicles; twenty-five is, however, the number usually composing a train.

The vehicles are not of a uniform description. The time-honored contrivances, still mostly in use, consist of a four-wheeled body, made in the most substantial manner, and carrying a huge box, of a tapering shape, much like a flatboat, some sixteen feet long at the top and twelve at the bottom, four feet wide and five feet high. The whole is surmounted by a double cover of sheets of osnaburg, resting on a succession of bows. These immense structures, facetiously denominated "prairie schooners," are made to carry from five to seven thousand pounds each. Of late a smaller kind of vehicle, nearly like the ordinary farmers' wagons, have been largely employed. Opinions as to their respective preferableness greatly differ among the freighters.

The draught animals in most general use at this moment are oxen. In their selection more attention is, of course, paid to strength of body than purity of blood. Such stock is promiscuously raised in large numbers all over the prairies of the border. Most of it is grass fed, and unaccustomed to any kind of shelter—two most essential qualities while doing freighting service on the Plains. Their work is hard and treatment bad; and hence, like the stage horses of Eastern cities, they are soon used up. Two seasons are all they are expected to go through. On the lapse of these they are fixed up for the beef market.

Horses are seldom used for pulling heavy loads across the Plains. Mules, however, are extensively employed, owing to their great powers of endurance. As five yoke of oxen cost no more on the frontiers than one pair of good mules, only the United States government (in the transportation of military stores) and the wealthier among the freighters, that find an object in making quick trips, can afford them.

One teamster for each wagon is attached to the train. Under his charge there is one yoke of oxen or one pair of mules for every thousand pounds of freight.

From four to ten extra hands further accompany each train, to fill possible vacancies and do all work not strictly coming within the province of the driver. One or more so-called mess wagons, carrying cooking and eating utensils, and the provisions respectively allowed to the several

messes into which the "crew" of the train is divided, also form part of the cortege, under the special superintendence of an equal number of cooks, whose duties are confined to the gratification of stomachial cravings.

The whole—drivers, cooks, extra hands, oxen, mules, and wagons—is under the supreme command of the "wagon or trainmaster" and his assistant, both of whom are vested with authority as plenary as that accorded to officers of vessels at sea. Sometimes the owners of the transported goods, who then exercises the functions of a supercargo, travel with the trains, but leave the direction of their movements to the trainmasters.

The task imposed upon the latter is by no means an easy one, and hence great care is taken in their selection. They have all been for tens of years inured to the difficulties, hardships, and dangers of freighting on the Plains. Nine out of every ten commenced their career as lowly teamsters, and succeeded, by long and faithful services only, in attaining their present positions. They are all men of great physical vigor and undaunted courage, ready resolution and tireless execution. They know how to command and how to enforce obedience. But not all their characteristics are equally laudable. They can swear worse than Turks; they love whisky; they never shrink from a fight; they are experts in the use of bowie-knife and revolver; they are often guilty of barbarous tyranny, and abuse their subordinates as cruelly with words and deeds as our ocean captains and mates. The oxwhip and bullets are frequently resorted to by them as means of preserving discipline.

Although atrocities never become imperative, it cannot be denied that the law of self-preservation necessitates great rigor on their part towards the "crews." They consist mostly of desperadoes and villains from all parts of the globe—fighting men, border ruffians, escaped convicts, unpunished thieves and assassins; in short, the moral scum and dregs of both the East and West enlist in their ranks as a last refuge. From the great number of drivers wanted every spring, and their thankless, toilsome work and slavish treatment, the demand always transcends the supply, and hence a "character" is never required at the "recruiting office." The only qualification demanded is a knowledge of the use of the whip, of bovine nature, and the meaning of "gee" and "haw." That "moral persuasion" would fall short of effect in the management of such motley, dare-devilish elements is obvious.

Such is the *personnel* of the caravans launched every spring upon the Plains. On the first day of the journey a few miles only are generally made, in order to have time to acquaint men and animals with their respective duties. But from the second the regular routine of freighting life is strictly enforced.

Long before daylight every morning the whole camp is aroused by the guards. Reluctantly the sleepers crawl out of their tents and wagons, in which they had found rest from the fatigues of the preceding day. The time between rising and breakfast is devoted to yawning and stretching the limbs, stiffened by the hardness of their primitive couches. Their toilet is soon made. Washing and combing are looked upon as superfluities by the genuine "bull whacker." The cooks only go through a superficial lavation of their digits previous to diving them in doughy depths. The preparation of the morning or any other repast does not tax their

time or culinary accomplishments to an unusual extent. Bread baked in pans and pregnated with a superabundance of saleratus, boiled rice and beans, fried bacon, and, perhaps, dried apples, form, together with "flapjacks," and an undefinable concoction passing for coffee, the simple, unvarying bill of fare.

Breakfast being completed—the dewy prairie carpet representing the table cloth and dirty tins the dishes—the command of the wagon-master to "drive up" is heard. The teamsters all sally out to assist the night herders in getting the animals within the elliptical enclosure denominated "corral," nightly constructed out of the wagons, with an opening at one end. The quadrupeds being all crowded between the vehicles, ropes are stretched across the inlet, and all hands go to work saddling, harnessing, yoking, chaining. For a short time the utmost uproar and confusion then predominates. The drivers belch forth oaths and curses in furious succession. Their lashes, fists, and feet belabor the animals most mercilessly. In return the mules rear and kick, and the oxen butt and balk. Distressed braying and lowing sound on all sides. But before the lapse of many minutes order comes out of chaos, and each of the conflicting elements finds its proper place. At last the commander-in-chief gives the sign of readiness by mounting his mule, and before sun-up the whole of the caravan is moving along the road.

Whoever has journeyed over the Plains will readily acknowledge that the grandest sights to be enjoyed are a buffalo herd flying from hunters and freight trains in full motion. When the traveler is yet afar off, the approach of the trains is revealed in an unmistakeable manner. Should the wind carry the sound in the right direction, the jarring and creaking of the wagons, the reverberations of cracking whips, and the incessant "gee-ho's" and "ho-haw's" of the teamsters will be carried through the rarified atmosphere to his ears long before the caravan itself will burst upon his vision. Having neared within a few miles, the train rises gradually into sight, just as ships appear to emerge from below the horizon. The whole being in view, the shining white of the covers and the hull-like appearance of the wagons produces a striking resemblance to a fleet sailing, with all canvass spread, over a seeming sea.

On nearing still closer he will first come up with the train-master, who always keeps a mile or so ahead of the caravan, pre-examining the condition of the road, looking out for camping places, etc., etc., and leaving the immediate charge of the train to his assistant. Next he will meet the carriage of the proprietor of the cargo, should he accompany the train, and, finally, the sluggish, tardy file of "prairie schooners" will pass before him.

The close review will convince him at once that "distance lends enchantment to the view." The main features of the aspect—panting, melancholy oxen, and the hardest looking specimens of humanity he ever gazed upon, worrying sullenly along—are little apt to produce any thing like admiration. The shapeless, perforated slouched hats; the full grown, unkempt *chevelures* and beards; the ragged shirts and inexpressibles (coats are entirely out of place on the Plains,) and, above all, the thick encrustations of sweat and dust, evidently of many days' standing, on their hands and faces, will hardly tickle his sense of the beautiful. As to looks, indeed, Mississippi steamboat crews are perfect dandies compared with those of the prairie fleets.

The trains in going out move at the rate of from a mile-and-a-half to two miles per hour, and from fifteen to twenty miles per day. When the road is heavy, either from rain or sand, much less is made. The daily distances traveled have to depend very frequently on the location of suitable camping places. The wagon-masters, knowing every inch of the ground, can always regulate their diurnal movements in advance.

In the forenoon, after journeying until the sun is within an hour or so of the meridian, the train is brought to a stop, after turning a little off the road. If water was known to be unobtainable before starting, that indispensable necessity was brought along in the casks that every wagon carries. The animals being unhitched to graze, the men quietly await their dinner. The preparation of this often sorely puzzles the cooks in the timberless regions, if the loads should be too heavy to allow the carrying of a supply of fuel. The only resort then is the "buffalo chips," in the frantic search of which they have to set out with bags as soon as the train has come to a halt. But even this fails at times, when the messes have to content themselves with slices of raw bacon and bread.

The dinner being eaten, the crew, with the exception of the herders, sleep away the hot noon hours. At two o'clock the wagon-master again rouses the camp, and the scenes of the morning are once more gone through. Before three o'clock the train is again on the road and plods on until sunset, when the day's work is brought to an end. The "corral" is again formed; the animals let loose; the different night watches and herders appointed; the supper cooked and swallowed; the pipes smoked; the incidents of this and other journeys discussed; and at nine o'clock all those who are exempt from night duties repose in Morpheus' arms.

This is the daily run of the freighter's life. The only diversification of its dull rotation is an occasional hunt, a break down, with its vexations and extra labor; the excitement produced by the supposed or actual vicinity of hostile Indians, and last, not least, the terror of all prairie men—the stampede of their animals. This worst affliction—the result of Indian stratagem, attacks of wolves, and other causes of sudden fright—never happens without entailing hours, and not seldom days and weeks, of often but partially successful attempts at recapture, involving a chase of hundreds of miles over trackless, destitute regions.

Having reached the point of destination, the cargoes are discharged as fast as possible, and, after a day or two of rest, the return trips entered upon. It is accomplished in much better time than the journey out. The Pike's Peak and Salt Lake freighters, who are compelled to return entirely empty, usually couple two of their wagons and have them pulled by one team, while the other is being driven along. Going in, at times, tells worse upon the oxen than going out, as they endure hard work better than fast traveling.

Arriving in port, the caravan is either dissolved by discharging and paying off the men, stowing away the wagons and sending the animals out on pasture, or the train receives a second load and is at once turned back. In either case the hands get whatever wages they have earned on the first trip. They are no sooner in receipt of their balances—like the sailors they receive advances, not in cash, but condemned army muskets, clothing, blankets, etc., etc., are forced upon them in a way at exorbitant prices—when most fall into the hands of land sharks, in the shape of Jewish sellers of clothing, who lurk in crowds about the freighting offices

on the return of the trains, and with the persistency, impudence, and blandishments of their prototypes in Chatham-street, never rest until at least a portion of the victim's earnings has found its way into their pockets.

After washing, shaving, and dressing the "Jacks" of the prairies proceed to have a high old time on benders, the intensity of which is only equaled by those mariners love to indulge in on returning from a cruise. The "bull whackers" reveal, indeed, the same exuberant fondness of vulgar physical pleasures and reckless improvidence. The first days of their renewed stay amidst civilized surroundings are uniformly spent in uninterrupted debauchery, and after emptying the cup of riotous living, it happens in most cases that they find themselves stripped of the fruits of their labors and privations of months, and once more obliged to "ship" or starve.

The annual freighting season but seldom extends over the 15th of October. On the 1st of November winter quarters are universally occupied.

STATISTICS.

The collection of correct figures in relation to the overland transportation business proved no easy matter. A similar task having never been undertaken, all guidance for the investigation was wanting, and the scattered character of the sources of information—from Florence, N. T., down to Westport, Mo.—still increased the attending difficulties. Absolute completeness is, therefore, not claimed for the subjoined statistical tables; but whatever has been given is taken from the books of warehousemen, and hence can be relied on as correct.

In the New Mexico as well as the Pike's Peak, Indian, and Utah traffic, the transporting business is transacted partly by the traders themselves, and partly by persons that devote their time, labor, and capital solely to the carrying trade proper. The equipment of trains requires a large outlay of capital, which has necessarily to remain idle for one half of every year, so that traders find it hardly less profitable to pay freight and invest their means in merchandising, than to do their own freighting, the saving often coming short of the expenses and the loss of interest on the capital represented by vehicles and animals during their idleness in the winter season.

The following expositions shows the number of men, wagons, and animals employed in the carrying trade, together with the weight of the merchandise transported from the several outfitting and starting points. Kansas City being all but exclusively engaged in the New Mexico traffic, the figures under that head reflect that branch of overland transportation only. The number of carriers in that line has been found to exceed two hundred, and hence only aggregate numbers have been given, to save space.

The numbers appearing in connection with Leavenworth City and other points north of Kansas City show the carrying means employed in the Pike's Peak and Utah traffic.

In conjunction with private freighting, appears that done by contractors under the auspices of the War Department. All the military posts of Kansas, Nebraska, Utah, and New Mexico obtain their supplies of articles of wear, provisions, arms, ammunition, grain for stock, etc., etc., through them.

STATEMENT SHOWING THE EXTENT OF THE OVERLAND TRANSPORTATION BUSINESS OF VARIOUS MISSOURI RIVER TOWNS TO NEW MEXICO, THE PIKE'S PEAK GOLD REGIONS, UTAH, AND POINTS ON THE PLAINS.

FROM KANSAS CITY—NEW MEXICO TRADE.

Name of freighters.	ON PRIVATE ACCOUNT.					Weight of freight.	Destination.
	Men.	Hors's.	Mules.	Oxen.	Wagons.		
.....	5,984	464	5,958	17,386	2,170	11,580,000	New Mexico.
FOR GOVERNMENT.							
Irwin, Jackman & Co., 12 trains.....	410	...	82	4,104	317	1,837,686	Forta Garland, Union, & Wise.
Russell, Majors & Waddell—by their sub-contractors, Alexander Majors, Briant & Bernard, Childs, Hayes & Co., & Thompson & Levander—21 trains.....	690	...	134	6,480	546	2,971,438	Forta Larned, Wise & Union.
Total from Kansas City	7,084	464	6,149	27,920	3,033	16,489,124	

FROM LEAVENWORTH CITY TO PIKE'S PEAK, UTAH, AND INTERMEDIATE POINTS.

	ON PRIVATE ACCOUNT.					Freight.	Destination.
	Men.	Hors's.	Mules.	Oxen.	Wagons.		
Jones & Cartwright, 24 trains.....	780	..	96	6,844	624	3,744,000	Denver City.
D. D. White & Co.....	96	..	12	890	78	468,000	"
Clayton, Lowe & Co.....	65	..	40	400	50	225,590	"
L. Bartolet.....	35	..	3	250	35	180,000	"
Please, Byers & Co.....	50	..	6	800	18	150,000	"
Several small firms, with from 5 to 9 teams each	48	..	11	428	42	210,000	"
FOR THE GOVERNMENT.							
Russell, Majors & Waddell—by their sub-contractor, A. Majors—6 trains	192	..	38	1,842	156	728,492	Forta Larned, Union and Garland.
To. from Leavenw'th city	1,216	..	206	10,952	1,002	5,656,082	

FROM ATCHISON TO PIKE'S PEAK, UTAH, AND INTERMEDIATE POINTS.

	ON PRIVATE ACCOUNT.					Freight.	Destination.
	Men.	Hors's.	Mules.	Oxen.	Wagons.		
D. D. White & Co., start trains both from Leavenworth and Atchison	120	..	22	1,542	102	750,000	Denver City.
M. Elsbach & Co.....	59	..	72	550	53	165,340	"
J. B. Doyle & Co., 2 trains	72	..	12	540	60	241,904	"
Roberts & Lauderdale...	40	..	5	380	32	170,000	"
Hugh Murdock.....	31	..	3	168	28	112,000	"
J. Samuels.....	12	..	3	120	10	48,000	"
G. H. Gratiot.....	30	..	6	240	20	51,980	"
Freeport Mining Co.....	11	..	3	122	10	41,000	"
Almy & Fisher.....	13	..	3	120	10	40,000	"
B. F. Coons.....	24	..	4	180	28	31,500	"
M. Marten.....	15	..	5	86	10	36,457	"
Wallingford & Murphy..	25	..	6	186	20	70,000	"
Penton & Purcell.....	15	..	4	100	12	60,000	"
J. E. Walker.....	30	..	6	200	25	100,000	Salt Lake City.
Livingston, Bell & Co....	64	..	8	600	60	187,000	"
T. Kuridson.....	20	..	66	...	16	48,000	"

	Men.	Hors's.	Mules.	Oxen.	Wagons.	Freight.	Destination.
Clayton & Lowe	12	..	40	...	10	30,000	Denver City.
Gilbert & Gerrish	40	..	5	460	33	165,000	Salt Lake City.
Dunning & Mason	39	..	3	350	33	160,000	Denver City.
Bevins & Miller	56	..	9	500	49	250,000	"
Oldham	14	..	2	100	12	550,000	"
John Dold & Brother ...	38	..	4	420	35	171,000	"
W. S. Williams, N. P. Perry, Myers & Lockhart, L. B. Gaylord, Baker & Reed, J. M. Broadwell, Maxwell & Walker, E. R. Watson, Tim Goodale, F. Boisveah, J. Ferrier, J. C. Davis & Co., W. E. Brown & Co., W. Kinkead, Arnold & Martin, Blake & Kelly, and Clingham & Bro., from 2 to 8 wagons each—together.....	125	..	117	512	81	271,500	Denver City.

FOR THE GOVERNMENT.

Irwin, Jackman & Co., outfitting depots both in Kansas City and Atchison, 20 trains	650	..	75	6,240	520	3,120,000	Fort's Kearney, Laramie and
Total from Atchison...	1,591	..	472	13,640	1,280	6,097,943	Utah territory.

FROM ST. JOSEPH TO THE PIKE'S PEAK GOLD REGIONS, UTAH, AND WAY POINTS.

No regular outfitting houses being located here, the names and several returns of the freighters could not be had. The keepers of the two steam ferries across the Missouri at the same place conduct, however, a register of the freight wagons that crossed over since the 1st of March last. According to their count there started for the Plains from St. Joseph (emigrant wagons excluded):—

Men.	Mules & horses.	Oxen.	Wagons.	Freight, (4,000 lbs. to each wagon)
496	520	3,980	478	1,672,000

FROM NEBRASKA CITY (TO PIKE'S PEAK GOLD REGIONS AND WAY POINTS) AND DENVER CITY.

	Men.	Hors's.	Mules.	Oxen.	Wagons.	Freight.	
Alex. Majors, 32 trains..	800	..	100	10,084	632	4,992,000	.....
A. B. Byram	32	..	4	410	32	192,000	.....
Hawkes & Nucholls	64	..	9	624	52	312,000	.....
Total Nebraska City...	896	..	113	11,118	716	5,496,000	

FROM OMAHA CITY.

	Men.	Hors's.	Mules.	Oxen.	Wagons.	Freight.	Destination.
King & Wood, 4 trains...	136	260	...	...	120	340,000	Denver City.
H. Z. Chapman	34	...	80	...	32	90,000	"
J. Y. & R. A. Brown....	40	74	...	...	36	86,000	"
Twenty-one different parties, with from 2 to 7 wagons each—together	114	43	34	340	84	203,000	"
Total from Omaha City	324	377	114	340	272	713,000	

RECAPITULATION.

	Men.	Horses.	Mules.	Oxen.	Wagons.	Freight.
Kansas City.....	7,084	464	6,149	27,920	3,088	16,439,184
Leavenworth City.....	1,216	...	206	10,952	1,008	5,656,082
Atchison.....	1,591	...	472	13,640	1,280	6,007,943
St. Joseph.....	490	...	520	3,980	418	1,672,000
Nebraska City.....	896	...	113	11,118	916	5,496,000
Omaha City.....	324	377	114	240	272	713,000
Grand total.....	11,601	844	7,574	67,950	6,922	36,074,149

Or, in other words, 11,601 men, 844 horses, 7,575 mules, 67,950 oxen, 6,932 wagons, 36,074,149 pounds, or about 18,000 tons of freight.

A full rigged "prairie schooner," spanned with the usual number of six yoke of oxen, will extend over a length of about 70 feet. If the 6,900 wagons should, therefore, be brought into one line with their four-legged means of motion, they would cover a distance of over 125 miles.

From the table it will be seen that Messrs. Alexander Majors, Irwin, Jackman & Co., Jones & Cartwright, and D. D. White & Co. are the heaviest freighters. Mr. Majors sent out, during the last seasons, no less than fifty-one trains of twenty-six wagons each, on the War Department's as well as his own account. About 1,600 men, 15,500 oxen, and 300 mules were employed by him. Messrs. Irwin, Jackman & Co., had thirty-two trains of twenty-six wagons each running, worked by 1,060 men, 160 mules, and 10,345 oxen. Messrs. Jones & Cartwright fitted out twenty-four trains of equal number of wagons, operated with 730 men, 96 mules, and 6,844 oxen. D. D. White & Co. equipped seven trains, employing 216 men, 118 mules, and 2,432 oxen.

The amount of capital invested is, of course, very large, the average cost of a train of twenty-six wagons being about \$15,000.

The operating expenses of each train are from two to four thousand dollars, according to the length of the trip and the wages paid. Wagon masters receive from \$100 to \$150 per month and "found!" teamsters of Caucasian descent from \$20 to \$25, and Mexicans (mostly employed by New Mexico freighters,) \$15 per month and "found." The government freighters receive from \$1 40 a \$1 75, according to the stage of the season, for every hundred pounds carried one hundred miles. The private freighters charge from 1½c. to 2c. for the same by weight and distance, the rise and fall being likewise regulated by the season—the rates being highest in the early spring and late fall, and lowest in mid-summer. At these rates enormous profits are always realized, if extraordinary accidents—such as heavy losses of cattle—do not happen. One trip usually realizes the original cost of the train.

In preceding estimates the value of the exports and imports of the several regions supplied by the overland traffic during the season just closed was given for—

New Mexico, at about	\$8,000,000
The Pike's Peak gold regions	6,000,000
Utah.....	500,000
The Indian trade.....	1,000,000
Total	\$10,500,000

But in order to arrive at a full idea of the capital employed in the commerce of the great Plains we must add the amount invested in the carrying trade. This will foot up—

Wages of 11,000 teamsters, receiving on an average \$75 per month	\$825,000
Value of 844 horses, at \$125 each	105,400
" 7,574 mules "	948,750
" 67,950 oxen, at \$35 each	1,378,500
" 6,922 wagons, at \$150 each, including cost of covers, yokes, chains, etc., etc.	1,033,300
Provisions for men	250,000
Total	\$5,545,900
Add the above	10,500,000
Grand total, about	\$16,000,000

Commanding as the foregoing figures may appear, it should not be forgotten in contemplating them that, in reference to the carrying trade, only those data were given that were accessible. Many freighters have no regular places of business, and, from their constant locomotion, can be found only during their short sojourns at the outfitting points. Quite a number of traders that do their own freighting furthermore load trains directly from the landing places, without the mediation of warehousemen, and start out without being heard of.

It would be likewise well to consider that every overland emigrant is a freighter on a small scale, as he travels with his own conveyances and always carries a complete outfit, intended to last several months. Allowing one vehicle and two yoke of oxen, or a pair of mules, to every four persons—a presumption which competent judges will certainly deem rather below than above the truth—some five millions more would be added.

Art. II.—BAHAMAS

THEIR FORMATION—POPULATION—GEOGRAPHICAL POSITION—PRODUCTIONS—ELIGIBILITY AS A RESORT FOR INVALIDS—WRECKING—SPONGE BUSINESS—EXPERIMENT OF EMANCIPATION, ETC., ETC.

Most countries become subjects of commercial interest in proportion to the variety and value of their productions. The group of islands we are about to consider, are an object of terror on account of the vast destruction of the products of human industry they cause. They have recently, however, become attractive, as one of the most, if not most eligible and accessible resorts for invalids, who strive to escape the unrelieved severity of our Northern winter.

This range of islands stretches nearly from Florida to Hayti, extending from the Matinilla Reef in latitude 27° 50' N., longitude 79° 5' W., to Turk's Island 21° 23' N., longitude 71° 5' W., a distance of about 650 miles. They are of coral formation, with the slightest possible covering of soil, honey combed all over, especially on the shores, in many places affording capacious basins, such as are used for the manufacture of the world known Turk's Island salt. Long ages have the untold myriads upon myriads of animalculæ toiled in building them up. Our peninsula of Florida is of a similar formation, as well as the numberless islands and reefs winding around its southernmost extremity, and reaching from Cape Florida to the Tortugas, a distance of 200 miles. The little fillibusters are at work as busily as in the ages past, pushing on their scheme for the

annexation of Cuba to Florida, sooner or later, to be arrested, however, by water too deep for them to cross. Agassiz has made a calculation, that at their present rate of progress, it has taken 135,000 years to construct the peninsula of Florida. The Bahamas may have been commenced as an incidental enterprise 30,000 or 40,000 years later.

One of these islands has been rendered classic and immortal as the spot where Columbus landed on the memorable 12th of October, 1492. He called it San Salvador, (Holy Saviour,) in gratitude for his deliverance and success. It is also called Guanahani, and among sailors and wreckers, Cat Island, a designation that by concert, should be scouted and repudiated alike by mariners, merchants, and geographers, as altogether too trifling and vulgar to be applied to a spot of so much historical interest. The honor has been claimed for Watling's Island, as the spot upon which the great navigator first landed, but the general verdict seems to be, that it was on Watling's Island, that the keen eye of Columbus himself, during the anxious watchings of the previous night, discovered fitting lights, but that it was upon San Salvador that he first set his foot.

The external presentation of these islands and reefs was such, that the early Spanish navigators designated them in their own language as *Los Cayos*, "The Rocks." Hence, on maps yet extant, they are called "The Lucays or Bahamas." The word "Key," as applied to similar islands on our own coasts, from the Spanish *Cayo*, is now thoroughly Anglicized, and adopted in our language. The English, on some of their maps adopt the word, but retain very nearly the Spanish orthography "Cay." There must be more than 500 of these islands, varying from one square mile in area, to islands of more than 100 miles in length. The largest are Great Bahama, Abaco, Andros, New Providence, Eleuthera, Exuma, St. Salvador, Crooked Island, and Inagua. Nineteen only of the whole range are inhabited. The aggregate area, deemed worthy of survey by the British Government, is 2,842,000 acres, or 4,440 square miles, a trifle less in extent than the State of Connecticut. Less than half a million of acres have ever been improved or appropriated. The remainder lies unoccupied, mostly covered with impenetrable thickets, and forests of trees of small growth.

The chief towns are at Nassau, Harbor Island, and Turk's Island, each on the smaller islands of the group. The population is at present estimated at 28,000, of whom 8,000 are whites, and 20,000 are blacks. Of these, 2,000 whites at least, and 7,000 blacks, are concentrated in and about the town of Nassau, on the island of New Providence, the seat of government of the whole range, except Turk's Island, which has recently been set off under a separate presidency. The population has greatly increased, and the exports nearly doubled since the passage of the British Emancipation Act of 1834, which appropriated £20,000,000 to purchase and give freedom to the slaves of the British West Indies. At that time the slaves upon the Bahamas were set free.

These islands have a lean and scanty history. Passed by as worthless, by the great and rapacious conquistadors and voyagers, alike by Cortez, Pizarro, and De Soto, scorned alike by searchers for gold or for glory, or for the fabled fountains that were to confer perpetual youth on all who laved therein, they were long almost entirely neglected. They were deemed worthy of being subjected to her sway, however, by England in 1829, whose vast and indiscriminate appetite, has alike brought within

her stomach, more "capacious" than even that of Cardinal Wolsey, little barren rocks and vast empires, and who reckons among her seventy dependencies, Pitcairn's Island, with its 79 people, and British India with her 150,000,000.

The Spaniards landed on New Providence in 1641, took possession, and murdered the English Governor. The English recaptured the islands in 1666. The French and Spaniards in 1703 landed at New Providence, laid waste the town of Nassau, murdered nearly all the English inhabitants, and burnt alive Clark, the Governor. Among those who escaped were two small children, a boy and a girl, who reached a vessel in the harbor bound for Boston. A daughter of that boy, was the mother of John Brooke, a Revolutionary soldier, and forty years ago Governor of Massachusetts.

The harbor of Nassau, then became a refuge of freebooters, the original *fibustiers*. Too hotly pursued from the Windward Islands, Jamaica, and the Spanish main, they placed the large islands of Cuba and Hayti between them and their pursuers, and sought a place of safety in the snug harbor of Nassau. Their chief leader was called "Black Beard," and of him many traditions yet exist among the islanders. Buccaneersing was a semi-reputable trade, tolerated then, *as now*, among us, while committed against a foreign and helpless people, punishable only when formidable to British commerce. Sir Henry Morgan became very rich in his piratical forays, was knighted, and made Governor of Jamaica. The lesser knights were frequently strung up by the dozens. Old Port Royal, near Kingston, the chief town of Jamaica, vestiges of which the divers have been bringing to daylight, after their watery burial of 158 years, which was submerged by the convulsions of an earthquake in 1692, was, plainly speaking, but a nest of these fillibusters, or pirates. Conclusive evidence exists that a Governor of North Carolina acted in collusion with "Black Beard," when he made one of his sudden business excursions from New Providence over to the American coast.

The pirates becoming too pestilent and dangerous, the British Government sent over Woodes Rogers in 1718, vested with the powers of Governor of the Bahamas, and authorized him to issue a proclamation, pardoning all who would surrender. He surprised a fleet of a dozen or more vessels in the harbor, manned by 400 pirates, a fraction only escaping. Under his proclamation, 300 pirates surrendered and were pardoned. A few of these escaped, and again became pirates. Some of them settled upon the islands, and pursued the ordinary avocations of life.

For more than half a century little seems to have been cared, or known, or said about the islands. We note that among the list of governors during the intermediate period, appears the name of Shirley, who was a Royal Governor of Massachusetts. In 1776, Commodore Hopkins of our infant navy, landed at Nassau, took possession of the forts and town, and brought off to the United States, the governor Montfort Brown.

The Spaniards recovered possession of New Providence in 1781. In 1783, Colonel Deveau and some royalists from South Carolina, recaptured it for the British crown. Soon after, Lord Dunmore, the refugee Governor of Virginia, became Governor of the Bahamas. Aged negroes are now living at Nassau, who remember Lord Dunmore, and his "wild son, Colonel Jack Murray." New Providence received quite an accession to its population from loyalists who fled from our Southern States during the Revolution.

Since that period the islands have remained an expensive colony of the British crown, the population meagre, making small progress, till during the last quarter of a century, and even now embracing the limited number we have named.

The Colonial Government consists of the Governor, appointed by the crown, an Assembly of about twenty-eight members, a Legislative Council, which is a kind of *quasi* Senate, and an Executive Council appointed also by the crown for life.

We happened to be present at the last opening of the miniature Parliament, which was really done with considerable state. The Governor, Bayley, was escorted to the halls by the black military in their picturesque Zouave costume, preceded by the excellent African band of music. Surrounded by his Council, seated in his chair, dressed in military garb, his sword by his side, his chapeau upon his head, he received the Speaker and the Assembly, they all the while standing. The Speaker informed the Governor that he himself had been chosen Speaker, and asked approval of the choice. He then demanded for the members freedom of speech, freedom from arrest, and free access to his (the Governor's) person. The Governor graciously approved the choice, and granted the privileges demanded. Still sitting and covered, he delivered a speech, which, upon the principle that "brevity is the soul of wit," must have been excellent. Our ex-President Pierce, who was then sojourning at Nassau, with his invalid wife, was present. We trust he did not deem it a reflection on the long-winded messages of our presidents and governors.

The Speaker of the Assembly is paid. The members are not. Every member of the present Assembly for the "Out Islands," as they are called at the seat of government, was chosen from the merchants, professional men, and government officials residing at Nassau. This makes a neat tea party arrangement all around. It does not comport very well with our ideas of popular representation, still, as the laws enacted are generally wholesome and just, no complaint is made, and very little jealousy exists among the "Out Islanders." Even this little assembly is human. It is divided into a government party and anti-government party, and they fell to abusing each other as vulgarly and violently as though they had got their education in our American Congress.

The right of suffrage is extended alike to black and white, the chief qualification being that a voter must be a householder, "must boil his own pot," as they express it, or otherwise must be possessed of property to the amount of £100. The qualification of a member of the Assembly is, that he shall be possessed of property to the amount of £500. Colored men as well as white men are eligible to the Assembly, and two members of mixed blood now hold seats in that body recognized as equals and gentlemen.

The administration of justice is prompt and certain. The courts are on the model of the common law courts of Westminster, the practice based upon that in the Court of King's Bench. Blacks as well as whites are capable of being jurymen, if able to read and write, which a large proportion of them are taught to do, since they were emancipated in 1834. Dropping into a court of justice, we there saw a jury empaneled, consisting of six white men, three men of unmistakeable African origin, and three of mixed blood.

The most eligible way of reaching the islands is by the British mail

steamer *Karnak*, which sails every four weeks from the Cunard docks, Jersey City. The voyage is a delightful one. The writer bid adieu the last winter to his friends at Jersey City, all muffled in furs, at 2 P. M., the thermometer at 5° below zero, and our ship was boarded by government officials and others, in white roundabouts and palm leaf hats, the thermometer at 78° above zero, in just five days. The afternoon of the first day was severely cold. It remained so during the second day, but towards night the passengers began to throw off their overcoats. On the morning of the third day we were in the Gulf Stream, as the soothing breezes indicated, the water standing at a temperature of nearly 80°, and the sailors were scampering about the decks barefooted. Our cabin fires were all out, the port holes open, and it was too warm in the cabin for comfort. Although familiarized from boyhood with such scenes, a man with a soul under his shirt, can never step upon the deck of a proud ship, without feeling exhilarated, without feeling a re-repeated impression that there is no nobler proof of the power of man over the elements, of mind over matter, than a majestic ship. The famous lines of Byron recur, changing the pronoun which his supreme egotism prompted him to employ :—

"Once more upon the waters ! Yet once more !
And the waves bowed beneath her as a steed
That knows his rider."

Our ship was only a second or third rate craft of her kind ; yet how proudly she bore us onward. Against a strong wind, against the Gulf Stream current, onward she went at the rate of 200 miles per day, toward our destination. Limited as such speed is, in these days, for steamers, if it had been possible to have continued our course in a direct line towards the equator, we should have reached it in twelve days from New York.

Nassau is entirely *anomalous*. There is no other town on this hemisphere that resembles it. Our own Key West resembles it in the fact that it is built upon a great reef of coral, and in the fact that wrecking is the chief pursuit of the inhabitants. In all other respects they are unlike.

On landing at Nassau, the most striking feature in the vegetation, causing you to realize at once, what you have often dreamed of in imagination, that you are under a tropical sun, is the cocoa-nut tree. It is scattered about in the yards, gardens, and fields, the fruit pendant in large clusters. The lower leaves, sometimes twenty feet in length, wither and fall to the ground, new ones springing out and unfolding from the top. A long shaft is thus thrown upward of a cork-like porous nature, that can hardly be called wood. A huge tuft of foliage and fruit rests upon the top. A portion of one of the three black West India regiments, officered by white men, which the British maintain, is stationed here. These soldiers, in their picturesque Zouave costume, coming in the range of vision with the tall cocoa palm, almost persuades a man that he is suddenly transported to Egypt or some Oriental clime.

The structures and the streets of Nassau present to us a novel appearance. The forts, the public buildings, churches, and dwelling houses, are all built of blocks of concrete, rotten coral, smoothed and plastered over with the same material, and often painted with fancy tints. The town is upon a hill side, which rises to the height of about 100 feet. It seems to have been quite customary at Nassau, when a man desired to build, to select his lot, scrape off the thin surface soil, quarry his material in blocks

for his buildings and fences, throw the soil over the unoccupied area, and let the trees and shrubs spring up and grow again. Streets have been cut through the hill in the rear of the town for material for public buildings. When a street is made, the top soil is scraped off the whole length, leveled; then pulverized coral is spread over it. The rains, and even the slight dews, by operation on the lime, cement it together, and in a brief time you have an undeviated road, as level as a floor, perfectly clean, and dazzling to the eye. We never have seen streets so perfect and so clean. They are narrow, and no two of them parallel, being laid out on the plan of the Spainards, who first commenced the town. There is not a chimney in a dwelling house from one end of the town to the other. No fires are wanted for a century, except for mechanical purposes, or for cooking, and the kitchen is a little building by itself, and far off in the rear of the back yard as it can conveniently be built.

Fruits peculiar to the islands are numerous; among them are the orange and lemon, and half a score of other varieties of the citric genus. They range from the citron and shaddock, which are nearly the size of a man's head, to the tiny lime of an inch in diameter. The pine apple, the banana, the plantain, the sapadille, the mammee, the pawpaw, the mange, and a dozen other kinds of fruit grow almost spontaneously. Here and there are a few stray trees of the date palm, the bread fruit, and the fig. Grapes and peaches, which no tropical fruit except the orange and pine-apple rival in the deliciousness of their flavor, will not thrive upon the islands.

Sweet potatoes and yams are abundant. Of so easy cultivation are these roots, that it is said that from a single acre of land can be produced perpetually, supply for the daily wants of a family of five persons. The vegetables common to our latitude can all be produced between the months of October and March, although but little attention is paid to their culture. Squashes, turnips, beets, corn, and corn fodder, cabbages, radishes, lettuce, and potatoes can be found in the Nassau market, evidently, however, the results of unskillful and negligent culture in a climate where they could easily be brought to perfection.

All the soil upon the islands is triturated or pulverized coral, mingled with a meagre vegetable accumulation. Here are afforded striking and conclusive illustrations of the fact, that vegetation derives a large share of its nutriment from the atmosphere. Trees of magnitude grapple themselves upon almost a bare surface, insinuating their roots into every hole and crevice. Small forests of pines thus sustain themselves. Scattered trees are found of mahogany, lignum vitae, and the other hard woods

our severe and changeable climate. The peculiarity of the climate is its great uniformity. During the months of December, January, and February, the average temperature of the hours between sunrise and sunset was 76° Fahrenheit, the average temperature of the nights was 67°. The average of November and March was 81° for the day time, 79° for the night. During summer, the thermometer rarely rises above 90° at mid-day, and during winter, during the coldest hour of the night, it never sinks below 60°. The average temperature from November to March, inclusive, taking both night and day into account, was 73°.

The prevailing winds, which blow with almost the regularity of the trades, are from a northeasterly direction. Indeed, they may be called trade winds. Blowing as uniformly and gently now as then, they are the same breezes that wafted over Columbus and his frail shallops in safety. There is no chill in the winds, blow though they may, from any direction. In Italy, people try to get along without fires, but chilling and penetrating blasts, the "trainontanes," often sweep down from the Alps and the Appenines, and the consequence is, that all delicate persons, and indeed most strangers, suffer from the contact. Cold winds come down from the Alleghanies over the peninsula of Florida. "Northers" sweep over the attractive table lands of Texas. Only during a few days in the year do winds reach the Bahamas from the northwest, and then they are modified by crossing the Gulf Stream which stands at the temperature of 78° or more. The atmosphere is vitiated by few fogs, and no smokes or miasma of any kind, and few places on the globe can be found where the air is more uniform, and less mingled with alien ingredients. At the same time there is an almost imperceptible dampness pervading the atmosphere of the night, of which a person in sound health is not conscious. At Key West, on the same latitude, this moisture causes a slight mould upon books, furniture, &c. Among a thousand invalids, no two would be affected exactly in the same manner. In the nature of the case some would be affected injuriously. What is balm to the many, might be poison to the few. Perhaps invalids who always find themselves worse upon the sea shore, had better seek a high interior table land than the Bahamas.

The first effect of the climate upon a northern constitution is enervating, there being no bracing effect from any breeze. A cold clear air may be exactly what some invalids require, and this may account for the fact, that not only here, but at Madeira, in Florida, and elsewhere, some invalids begin to sink more rapidly simultaneously with their landing.

Marvelous tales are told of the recovery or renovation of persons who have resorted to the islands for relief. Several American gentlemen restored to health have engaged in business there, and become permanent

Sometimes no organ is in its normal condition. Restore the other organs, and the lungs perform their functions again. Perhaps the true philosophy of change in climate consists alone in the better opportunity afforded to bring back all the human functions to an harmonious action and co-operation. While so much is said favorable to the climate, truth requires the statement that some invalids seemed to be precipitated rapidly towards their end by their change of residence. In a few cases their disease did not seem to be arrested, and there was neither waste nor improvement visible to their friends.

Charming as the climate may be, there is great doubt whether Nassau, or any other part of the Bahamas, will become a favorite resort of invalids from "the States," on account of the great inconveniences to which they are subjected for want of suitable hotels and boarding-houses. Government has erected an hotel, yet of very limited accommodations. All experience proves that such establishments in the long run will be poorly and extravagantly kept, and their charges proportionally exorbitant. Invalids *must* have nutritious food in variety. Simple it may be, but it *must* be good and regularly supplied. Food is, in one sense, medicine. An invalid coming from the cold and bracing North, and from the comforts of a Northern home, chafes and suffers under meagre regimen. Again, invalids should find recreation and exercise in the open day. The climate of the Bahamas prohibits exercise in the open air, except to robust persons, between the hours of nine and four. Yet still the invalid should find attractions out of doors. Exercise on horseback is desirable to some, in protected vehicles to others. The roads, though they afford little variety of scene, are perfect. Again, invalids come from the mass of the people, the majority poor. Young professional men with limited means, constitute nearly one-half of the invalids of our country, who fly from the rigors of our climate. Many invalids *must* be accompanied by one or more of their families. High prices may shut them out entirely. The *tendency* at Nassau now is to glide into extortionate charges for every possible luxury, and some of the necessities of life. It is now positively so, in regard to horse and carriage hire. Invalids will not resort to Nassau, if they can reside at Tampa Bay at half the cost. The expense *now* of poor accommodations is quite reasonable. We speak of the dangers and the tendency. Let the boarding-houses be furnished as the hotel established under government auspices now is. Let ice be supplied constantly, which the government itself is encouraging by bounty. Let the best of meats and provisions be supplied by the regular packets. Let adequate attention be given to raising garden vegetables. These added to the excellent fruits, fish, and turtle peculiar to the islands, will enable landlords to furnish satisfactory board at reasonable rates. Last winter milk was twenty-eight cents per quart. Eggs were thirty-eight cents per dozen. The best of turkeys were three dollars each. Sugar cured hams were twenty cents per pound. Good fresh meats were sold at same or higher price. The price of many vegetables in the market were equally exorbitant, where they can actually be raised cheaper than we could produce them. Why is it? The population being dependent on government employment, on wrecking, on sponge raking, turtle fishing, &c., all precarious or semi-gambling pursuits, but little attention is paid to agriculture, or those industrial employments that require steady, devoted industry. In this connection we might say that all domesticated animals are of an inferior kind.

The chief pursuit of the people of all the Bahamas, except perhaps Turk's Island, is *wrecking*. Huzza! the negroes are running! the drays are rattling! a whole fleet of small schooners are entering the harbor with flags gaily streaming. What does it all mean? Two large ships bound from New York to New Orleans, laden with merchandise, have been wrecked, and the fleet of wreckers, more than thirty of them, are coming in loaded with the rescued cargoes. The ships were wrecked on the Banks just eastward of the Gulf Stream. Look at the charts, and you will perceive that for thousands of miles of area, the soundings laid down are but from two to four fathoms, with here and there sharp coral reefs cropping out. A very eligible ground, you see it is, for either accidental or designed wrecks. Remember, the Bahamas stretch for hundreds of miles, directly across one of the world's greatest highways, affording few channels between them, and intercepting almost the whole of the gigantic commerce of the Gulf of Mexico with the rest of the globe. All the wrecks or cargoes are brought into Nassau, inasmuch as the Admiralty Court sits there. Salvage is, however, generally settled by a reference to the Chamber of Commerce. That salvage is always liberal, ranging from thirty to eighty per cent.

The extent of the business is hardly credible. During the first three months of the present year sixteen vessels were wrecked, injured, or picked up upon the Bahamas, ranging from a ship of 1,000 tons to a small schooner of 145 tons. Their aggregate tonnage was 5,150 tons. The aggregate value of vessels, cargoes, and freights was about \$700,000. The aggregate property lost was \$475,000. The amount saved was \$225,000. But the salvage, expenses, commissions, &c., must have been \$125,000, leaving to owners and underwriters \$100,000, out of \$700,000, or *one-seventh* of the whole. These estimates are made from the best information that could be acquired. From data obtained at Nassau from persons cognizant of the current business, we found that the aggregate value of eighty vessels wrecked, and their cargoes and freights, during fifteen months previous to the first day of January last, was over \$2,600,000. About the same proportion, one-seventh, was saved. The hulls are almost universally scuttled and burned.

There are about 250 licensed wrecking vessels, embracing those of every shape and size, and about 2,500 men licensed to pursue the business. Some of them have other regular occupations, but take out licenses that they may be prepared for emergencies. The two chief ports of the wreckers are Nassau and Harbor Island. The wreckers are sailed on shares, the officers, the men, and the vessel drawing stipulated proportions of the salvage awarded. The crews are principally colored men. So also are some of the captains. The wreckers are very adventurous. As divers they exhibit almost incredible skill and daring, often diving into the lower holds of vessels, through two hatchways, and there among floating goods, and in water tainted with dirt, groceries, dye stuffs, and all sorts of villainous compounds, fastening the grappling irons to packages, and escaping to the light again unharmed. This is done by men, who, on dry land, cannot be persuaded or hired to do one day's work of profitable labor a week.

Wrecking is regulated by provincial statutes, which are very full, providing for punishment of every abuse, and upon the face of them appear equitable and just, but they seem to be cobwebs, restraints in theory and

not in practice. The nature of the pursuit enables transgressors to escape detection, and there is too much reason to believe that a large proportion of the vessels are designedly run into danger, and willfully abandoned to wreckers by the masters and crews of the vessels wrecked. The merchants of the town and "Out Islands" own the wrecking vessels. They buy the cargoes at auction at about sixty per cent of their value, except cargoes of cotton, coffee, &c., for which competition now compels the purchase at something like their value. They close up the business on commission. They decree the salvage, as a Chamber of Commerce. Thus, by snug arrangements all around, handsome profits are saved, and the town therefore is financially prosperous and wealthy.

The contrast between wrecking at Key West and the Bahamas is very striking. The number of vessels licensed at Key West is about forty, and of men 240, some of whom pursue also the business of fishing. Their field of disasters extends 200 miles, from Cape Florida to the Tortugas. Vessels incur precisely similar dangers as among the Bahamas, and their rescue is no more difficult or hazardous. Yet while nineteen-twentieths of the hulls of vessels wrecked on the Bahamas are totally lost, four-fifths at least are saved upon our own coasts. The following tabular statement of the number of vessels wrecked during ten years upon the Florida Reefs and islands, their value, salvage, and expenses, is taken from Judge Marvin's able and valuable work on "Salvage":—

	Vessels.	Value.	Salvage.	Total expenses.
1848.....	41	\$1,282,000	\$128,000	\$200,060
1849.....	46	1,805,000	127,870	219,160
1850.....	30	929,800	122,831	200,860
1851.....	34	950,000	75,850	165,080
1852.....	23	675,000	80,112	163,000
1853.....	59	1,973,000	174,350	330,100
1854.....	59	2,469,600	82,400	211,808
1855.....	80	2,844,077	100,495	190,910
1856.....	71	2,000,000	163,117	262,664
1857.....	50	1,837,950	101,890	181,272
Total.....	499	\$16,266,427	\$1,153,919	\$2,125,334

It thus appears that while on the Florida shores about *eighty-seven* per cent of the total value of vessels and cargo is saved, on the Bahamas but about *fourteen* per cent is saved. What renders these comparative results still more amazing, is the fact that the wreckers of Florida are mostly native Bahamians or their sons. They are nicknamed "Couchs," and the portion of Key West they inhabit is called "Couch-town," (*coucha* is Latin and Spanish for shell, from which the words "couch" and "couch" shells are derived.) Of the tonnage three-fourths, and of the total property lost on the Bahamas during the last winter, seven-eighths belonged to the United States. The total annual loss of American shipping and property on the Bahamas cannot be less than *two millions of dollars*, an amount equal to the *net* earnings for export of 300,000 of our people, taking the aggregate national exports as a test. Such an appalling destruction will in some way work out its remedy, for it is perfectly demonstrated in Florida, that measures can be taken comprehensive and efficient enough to prevent or to save three-fourths of the loss. American commerce owes a great debt to the Hon. William Marvin, United States Judge for the Southern District of Florida, for the fearlessness, fidelity, and ability, with which he has administered justice over this important and delicate subject.

The sponge business is largely pursued here. The exports of this article amount annually to about \$200,000. It is almost entirely the growth of the last twenty years. During that period the article has nearly quadrupled in value, and has been applied to a great variety of new purposes, especially in France. The sponge is compressed in powerful presses, and sacked like cotton. It is assorted and graded, samples being fastened on each package to show its quality. It is fished or raked, or grappled up from the clear sandy bottom at the depth of twenty, forty, and even sixty feet, and often far out from the shore. The water is so transparent that the growing sponge is visible on the bottom. The sponge is the covering, the habitation, of the lowest order of animated nature. Indeed, organization can hardly be detected in the animal. The sponge when first taken from the water is black, and at once becomes offensive to the smell. It will almost cause the flesh it touches to blister. The first process is to bury it in the sand, where it remains for two or three weeks, when the gelatinous animal matter seems to be absorbed or destroyed, or eaten by the insects that swarm in the sand. The boatmen who obtain it are paid in shares by the owners of the boats. This therefore becomes a precarious and semi-gambling pursuit, like wrecking, highly attractive to the colored population.

Although the Turk's Island salt is almost entirely exported from that island, the chances for manufacturing, or rather securing it, are abundant on many of the islands. The mistaken popular belief is, among us, that this salt is mined or quarried. Large, shallow reservoirs are found excavated in the coral near the shores. Shaped and cleaned, the sea water is admitted and enclosed. During the hot months of the summer, there being little or no rain, the evaporation goes on with great rapidity, and the salt is precipitated and crystalized in those beautiful and massive forms, in which it is exported. The salt trade might be increased to an indefinite extent, and, indeed, is now pursued from Inagua, and some other islands. The simon pure article of Turk's Island salt is made, or rather makes itself, at Key West in a limited quantity.

If the industry of the islands was employed in that direction, immense quantities of pine apples, oranges, lemons, limes, bananas, plantains, cocoa-nuts, sweet potatoes, yams, &c., might be produced for export.

The trade in turtle and turtle shell might be largely increased. Three species of turtle are now captured in abundance. The giant-sized sea turtle, with heads shaped like a hawk's bill, of which we sometimes see specimens upon our docks, is not desirable as an article of food. The tortoise proper, which alone affords the tortoise shell of commerce, is a rather small-sized variety, and not regarded as valuable food. The turtle of *cusiniers* and epicures exists in far greater abundance, and the pursuit of it could be made far more lucrative than it ever has been.

The effect of the British Emancipation Act on the African race on these islands is a subject of interest and curiosity. Their fate here can be no test of the great experiment. Simultaneously with the operation of the act, the wrecking and sponge business largely increased. These pursuits have engrossed the attention of a majority of the adult males, and inspires men with all the excitement that pertains to games of chance. While on the one hand, if the emancipated man was disposed to bend his energies to steady pursuits, he is enticed by attractions he cannot re-

sist to these precarious callings; on the other hand, if he is inclined to sink into entire indolence and stagnation, here pursuits are opened to stimulate and arouse him to earn irregular but ample support.

Columbus found the islands thickly inhabited by Indians. Like the Caribs, they have disappeared—the last remnant of them within the memory of the oldest inhabitants. The great mass of the present population are an indolent, rollicking, singing, good-natured people, who let the morrow take care of itself. When the wrecking and sponge money is exhausted, they can buy corn brought “from the States,” and crack up enough, in their crude mills, similar to coffee mills, to last a family a week, at a cost of fifty cents. Cheap fish in variety and abundance, variegated with all the colors of the rainbow, almost too brilliant and beautiful to be eaten, can always be had fresh from the ocean. Fish, hominy, sweet potatoes, yams, and bananas, are the chief food of the mass of the population, as soon as the calamity befalls them of a scarcity of wrecks. As for clothing, very little of the cheapest kind of coarse cloth, usually wrecked goods, will suffice, though when wrecking is good, and abundance of articles thrown ashore and sold, they dash out in finery and spurious jewelry to the extent of their means. They are orderly and observant of law, and lean with implicit reliance and confidence on the white race for counsel and advice in every emergency. The schools, sustained by the government, are well attended, and the race make rapid progress in elementary studies. White and black children attend these schools indiscriminately, as the families do the churches. The police of the town is almost entirely constituted of colored men, and they prove true to their responsibilities. At the same time it is patent to every observer, that the same vices, and same looseness of morals, common to all races, white and black, in the tropical regions, exist here.

The assumption frequently made in our country, that the African race has made greater progress in civilization in slavery during two centuries, than in their own land in all the centuries past, is thoroughly refuted by facts at the Bahamas. That portion of the colored population which is the most thrifty, most intelligent, most self-reliant, and most orderly, are mostly fresh from Africa, of the tribe of Nangoes, living in a settlement by themselves, and speaking their own language. They furnish the Nassau market principally with vegetables. The greatest share of the soldiers, and the band of musicians, are native Africans, preferred by the officers to those of American birth. A large proportion of the colored population are natives of Africa, bearing on their faces the scars cut and scored upon in their native land in obedience to their superstitions or customs.

Members of different tribes swarm and associate together, speaking their own several tongues, humming their own crude chants, and dancing their uncouth dances. The Nangoes, the Maudingoes, the Eboes, the Congoes, the Lucumis, the Craumarturs, the Nicabars, are some of the designations by which they are designated. By physical characteristics, members of different tribes are instantly detected by the slave buyers in Cuba, and so superior are some tribes to others, that they bring thirty or forty per cent more in the market. During the past summer, a slaver was wrecked on the island of Abaco, driven wide from her course to Cuba. She sailed from Africa with 400 captives, and 360 were rescued by the

wreckers, 40 having perished on the passage. They were mostly in a very squalid condition, young and naked. What must have been their surprise on landing on the docks at Nassau, to be greeted, seized upon, clothed, and fed by their own countrymen, speaking their own language. Yet such was doubtless the case, and they were immediately merged in these small but kindred communities.

On account of the peculiar circumstances affecting the case, no very definite inference can be found as to the political effect of the Emancipation Act on the colored race, except that it must be confessed, that to make a free man out a slave is itself a gigantic success, whether he is or is not morally or intellectually elevated.

It is a problem whether any great, populous, and highly-civilized nation can exist, of any blood or origin, in the tropical regions of the earth. We live centrally in the temperate zone. We live where men must work and think, or they must starve and freeze. When we read of the spontaneous growth, the perpetual verdure, and almost intoxicating breezes of the tropics, we at first might presume that there is the region for the most perfect development of our race. But all observation and all history prove, that beneath those radiant skies, fanned by those balmy breezes, man is indolent, enervated, and disarmed of ambition and energy. With very little exertion he can supply his food. As for clothing and shelter he needs but little. There he will neither starve nor freeze, no matter whether he works or thinks. Waddy Thompson, in his work on Mexico, says, that in traveling from Vera Cruz to Mexico and back, he did not see a single man, woman, or child at work, and that while the population of Massachusetts was about one-tenth as great as that of Mexico, its productions were nearly in an inverse ratio with the number of the respective populations. Intellectual and muscular vigor springing from the constant necessity for self-preservation, stimulated inventive genius, and a keen zest for social enjoyment, all conspire to impress with high civilization the people of the temperate zone. This view of a great law is not changed by the fact that refined and educated communities are found in the tropics. Wherever such a community of the Caucasian race is found, it fills all the offices of government, the military and judicial stations. They control the business and financial affairs, and fill the professions and controlling pursuits. The few are stimulated by the same motives as their kith and kin in other climes, enjoying all the advantages, and exempt from all the perils and exposures of an enervating climate. The question is, whether within the tropics the mass of a great and populous nation of Caucasian origin, would not rather recede than advance in the arts and refinements of civilization.

ART. III.—VALUATION OF LIFE INSURANCE POLICIES.

NUMBER IX.

WE have now completed the collection and construction of the tables of mortality, from which we believe the most satisfactory average can be obtained for the true valuation of our life policies. The number amounts to forty, and comprises the mortality for Carlisle and Northampton; for England, Sweden, Prussia, Hanover, Saxony, and Norway; for English, German, and American life companies; for English annuitants, and English and Scottish friendly societies. The number is sufficiently large to reduce very much the irregularities and accidental errors of each, if not to eliminate them entirely.

It is only by large and accumulated observations, that the true law of mortality can be obtained. If but a single family were observed, or a dozen families, or even a hundred, the mortality at each period of life could not be had with accuracy. So of the proportion between the two sexes, or any other phenomenon dependent upon numerous and complex causes. The same necessity of numerous observations belongs to inorganic as to living matter. Whenever we are ignorant of the cause, or of the intensity or law of causation, or when the causes are too numerous or complex to be subject to calculation, the multiplication of observations is necessary to reveal the law, and the more they are repeated, the more accurately will the law be obtained. With an unloaded and perfect die, the chance of throwing an ace is exactly one-sixth. But if we should observe a dozen or a hundred throws, the aces might vary considerably from a sixth of the whole number. But if the throws were continued for a thousand times, the result would be nearer a sixth; and for a million of times, it would be still nearer. So with the equality of the sexes. In a single family the children might be all boys or all girls. In a half dozen families the inequality would not be so great. In a thousand, the true ratio of 105 or 106 boys to 100 girls would be approached. In a whole State the approximation would be still nearer. And so in human mortality, the larger the number of observations, the more surely will the true rate for every period of life be accurately determined.

This extension of observations should also embrace many years as well as many persons. Years of general health, and also of epidemics; of famine and scarcity, as well as of abundance and plenty; of excessive and of diminished sickness; of the prevalence of one particular set of diseases, and then of another class; and for all this a long period is necessary. As the future lives of the insured will cover a long series of years, and every variety of seasons and of diseases, so the past experience from which we predict the future should be alike extensive.

Not only should our observations be extensive as to numbers, and as to time, but also as to space. A large town may happen to represent very well a whole country, but it is accidental and very improbable. The cities differ from the villages; large cities differ from small ones, and the country from the town. The valleys and the hills have not the same mortality. The residents along the water courses may be more or less healthy than on the uplands where the atmosphere is dry. The sea shore may not be like the interior, nor the region of fogs and rains like the

dryer and clearer table lands where the sun shines more regularly. As our assured extend from Maine to Iowa, where every variety of Northern climate prevails, the experience which we use for our calculations should embrace a like extent and variety.

So also as to race; our people are Saxons, and Celts, and Teutonic, and Slavonic, and Frank; and though most of them are from Great Britain and Ireland, many are from Germany and other countries of Europe. The difference of race though small, is real. Not only do these various people bring with them here the peculiarities of their race, but many of their habits, and vices, and customs, which effect their health and their mortality. Our observations should therefore be not English only, but should include other nations.

The insured are also of very many classes in society. They embrace the merchants and their clerks, the clergy and the teachers, the mechanics and the superintendents of our workshops; the professional men and those who receive salaries. They include the active and the sedentary; those whose employments are confining, and those who are much in the open air; those who have healthy and unhealthy trades; those who wear and tear the brain with thought or business, or plodding schemes, and those who pass their days in pleasure, ease, and comfort. In fact, every condition of society is found among our insured lives, except the very rich and the very poor.

Now this exclusion of the very rich is not important, as it is difficult to say whether their mortality is higher and lower than the general average of society. Guy's table for the English peerage, gives a higher rate than Farr's for the whole English people. But this is not permanent, and may be reversed hereafter, as the cause is probably in their vices, and excessive indulgences, and bad habits, which may be temporary. Among other rich persons these evil influences may not overbalance the good effects of comfort, intelligence, and travel, and medical skill, and careful nursing.

The exclusion of the poor is probably advantageous. For squalor, and starvation, and irregular and insufficient supplies of food, and bad lodgings, and foul air, and narrow streets, and deficient clothing, and neglect in sickness, and exposure to the inclemencies of the weather and of the seasons, must raise the mortality of the very poor above the average of the general population. But there is another class of the poor whose chances of life are above the average. The hard working laborers, the industrious artisans, who are not so poor as to be in want of food, or fuel, or clothing, or lodging, are the healthiest and most long-lived of the whole population. At least the statistics which Neison has collected and analyzed favor this proposition, and many reasons can be given for its truth. So that the exclusion of the poor, by embracing this class, is of but little advantage.

As the insured embrace so large a portion of the whole community, excluding only a class of persons whose general mortality differs but little from the rest, there would seem to be no objection to combining their experience with the general experience of the whole people. They comprise so great a variety of persons that it is not probable their mortality will differ from that of the general population.

In fact, the experience of insurance companies gives a higher mortality than Carlisle, and if the first years after admission be not counted, it is worse than Farr's. Below is a comparison of the rate of mortality in the

seventeen London life offices, with and without the first year's experience, and the rate at Carlisle and in Farr's English, from 1838 to 1844:—

Ages,	20.	30.	40.	50.	60.	70.	80.
Seventeen London offices	.0073	84	104	160	304	649	.140
Seventeen after 1st year.	.0088	95	116	176	332	664	.157
Carlisle adjusted.....	.0070	87	113	149	290	587	.130
England, 1838 to 1844..	.0080	98	126	180	320	666	.139

At five out of seven of these ages, the Actuaries' table gives a higher mortality than the Carlisle, and the exclusion of the first year brings the average rate up to Farr's No. 2. So that when the influence of the medical examination of new members is not counted, the mortality in the English life offices is above the rate for the whole population.

It would seem therefore probable, that the class who are insured, are not more likely to be long-lived than the general population of the country. And many other reasons can be given for this anticipated result. The companies are liable to imposition by unhealthy lives; the most vigorous are not disposed to apply for insurance, and if circumstances induce them to do so, they are more likely to withdraw than others; and many of the applicants are of broken and desperate fortunes, whose blasted hopes and corroding anxieties bring them to an early grave.

We think, therefore, that the extension of our observations should include not only numbers, time, space, countries, and races, but also all classes of society. And, therefore, the large collection of good and reliable tables we have made, can be combined to advantage to predict the future mortality of our insured.

This is especially appropriate, because the experience of insurance companies that we possess, is their whole experience, which is not at all what we want. When we undertake to value the policies of a life office they have all been running for some time. Many are recent, it is true, but many have been in existence five, ten, or fifteen years. And what we wish to know is, the probable duration of the lives of each different set. Mr. James, of the Girard office, has indicated the proper course to pursue in such circumstances, but it involves so much labor, and so many separate calculations, that it is not likely to be adopted. His calculations, based on the experience of the seventeen London offices, for the separate sets of policies, showed that an advance of fourteen per cent over the general experience of these offices was needed, to obtain the proper valuation in the particular cases he was considering. The reason of this is, that the whole experience is not the same as the future experience—that the past has been less than the future will be—that the recent members have not suffered the same mortality as those who have been long insured.

This general reason, and these calculations of Mr. James, indicate that the whole experience of insurance companies give too low a mortality, especially for the early years of life when new members are admitted. And as this error of these tables will be corrected by combining them with others giving the general experience of the whole community, we have another argument in favor of taking the average of all our tables.

Another evidence in favor of the propriety of combining all, is the near agreement between them, especially the best—those founded on the largest numbers, or those derived from the most accurate observations. To express this agreement more precisely we have compared the average table with the others for every five years from the age of fifteen to ninety,

and have found that at every period more than half the forty tables are within ten per cent of the average, and that only four or five vary from it at any age as much as twenty-five per cent. And these four or five were in all cases tables that deserve but slight weight in the proposed combination. At some ages twenty-seven out of forty were within ten per cent, and at some only three varied as much as twenty-five per cent.

Another reason in favor of the combination is that the average table is very near to the best tables, and generally between the best. Of our several tables, Farr's No. 2 and the Actuaries' are the most esteemed; another that we think worthy of much estimation is the one derived from the experience of the London companies, after excluding the first year of each policy. We have compared the average table with these three, and with the Carlisle and Davies' Equitable, and here is the result, the numbers below expressing the percentage of each table above the average by +, and below by — :—

	Ages,	20.	30.	40.	50.	60.	70.	80.	90.
Farr's No. 2.....		4+	6+	2+	3+	0	1+	2—	3—
Actuaries'.....		8—	9—	16—	8—	5—	0	1—	11+
Actuaries' after 1st year....		14+	1—	6—	0	4+	2—	11+	21+
Carlisle adjusted.....		9+	2+	3+	19—	2—	17—	12—	11—
Davies' equitable.....		13—	0	2+	4+	6—	19—	5—	8—

The mode of reading the above is that, at the age of twenty, Farr's No. 2 gives a mortality four per cent higher than the average of our forty tables, and the Actuaries' eight per cent below.

This near agreement of the average with the best tables might be expected, from the greater weight allowed them in the combination, but still it is an argument in favor of the reliability of the result.

To these general reasons in favor of combining all these tables, we will add that there is nothing in the climate or position of the different countries that would make their mortalities differ from our Northern States. All are so far north as to be free from the malarious influences of heat, and none are liable to the depressing effects of cold. The fogs of England, and the changeable and damp winds due to her insular position, do not make her more unhealthy than other countries. And the cold winters of Sweden, though depressing and injurious to the feeble, are bracing and stimulating to the strong and vigorous, and beneficial rather than injurious. Nor do they differ much in other particulars which influence longevity. England has more large cities than Sweden or Prussia, but if her population be considered the difference is small. The habits, comforts, intelligence, morality, medical skill, and employments are not dissimilar. The race is generally Teutonic; the density of population, though differing considerably, is not important except in the cities; the religion is for the most part Protestant; vices and luxuries are no where excessive; education is general; poverty and want are pretty equally distributed; and though uniformity in none of these things prevails, the dissimilarity is never great or important.

For our country, so different in many respects from each of the European countries whence we sprung, and yet so similar to them all, it is the more appropriate to embrace all their statistics in one general average to obtain the mortality which we may here anticipate, giving, however, to Great Britain, whence most of us have come, a greater influence on the result.

If we combine all, it is not necessary or proper to give each one an equal influence in producing the result; some are more accurate than others, some more esteemed, some founded on larger numbers, or on longer continuance of observations, or on experience more like ours, and all these things should have their proper weight in obtaining the average.

If all the facts were equally accurate and reliable, and all equally well suited to our wants, the proper mode of combination would be to collect all the living and the dying at each age, or for each decade, and form a table from the sums thus obtained. But if this were done, the English Registrars' observations would outweigh all the rest, and the superior accuracy of some of the other observations, and their similarity to the cases to which we wish to apply them, would lose their proper influence on the result. The course we have thought best, is to obtain the rate of mortality for each age and each set of observations, and multiply this by a number representing the value of this set, then divide the sum of all these products by the sum of all the multipliers. As the rate of mortality varies very rapidly for each age, this element is well suited for this purpose, and if the proper weight is given to each table the result cannot fail to be satisfactory.

To the Actuaries' table we have assigned the largest influence in our combination, giving it a weight of fifteen, and a like weight to the table we have constructed from the same materials. These large numbers are due to it for the extent of its observations, both as to numbers and time, and for the accuracy and care with which it has been prepared and constructed. The likeness also between the classes of its members and our life insurers is another reason in its favor.

To Farr's No. 2 for males, and to our reconstruction of this table, as also to our table for males and females for the same seven years from 1838 to 1844, we have given a weight of ten. The immense numbers on which these tables are based, and the care with which they have been prepared, entitle them to this large weight in our combination. Besides these three, we have given the same weight to the English table from 1845 to 1854, and to the experience of the seventeen London offices after the first year was excluded from the observations.

To the two tables of Finlaison, to Farr's Northampton, and to Neison's Scottish and English Friendly Societies, we have only given a weight of one. All of these five are irregular, anomalous, and but slightly esteemed. They have other defects which we will not stop to particularize.

To Milne's Carlisle, although adjusted to some extent, we have only allowed a weight of three; but to our reconstruction of this table, which is nearly the same with it, except that it is free from its irregularities, we have given a weight of five. These numbers are too large for the limited experience on which this table was based, but they are given because of the estimation in which it has been held, and the near agreement of its general results with those derived from the best tables.

To the three Swedish tables since 1795 we have assigned a weight of five, but Price's Sweden we have only multiplied by two. To the three English tables for the year 1841, including Farr's No. 1, we have given a weight of five; as also to Neison's for the three years from 1839 to 1841, to Davies' Equitable, to Morgan's Equitable, to the Eagle and the Amicable, to Gotha and the fifth year of the insurers in the London offices, and also to the experience in these offices when the effect of selec-

tion was exhausted. To Saxony, and Norway, and Prussia, and Hanover we have only given a weight of three; as also to Babbage's Equitable, and the experience of the English offices in towns. To the two tables founded on the policies and lives in the Economic Society we have given a weight of two. For the three American tables we have assigned a weight of three to the first, which gives the experience of the Mutual Life of New York, four when this is joined to the Mutual Benefit, and six when both are united with the New York Life and the results in Massachusetts for 1859. This completes our series of tables, and makes the total amount of weights to be two hundred, of which one hundred belongs to the cities and countries, and one hundred to the life companies and friendly societies.

We have not, however, allowed the full weight to the Life Companies' experience at the earlier ages. Beginning at fifteen, the sum of their assigned weight was only twenty, two more were added at each age up to fifty-five, when their full influence was allowed. This was done because of the small numbers in these companies at the earlier ages, and because of the objections to their experience at this time of life.

The resulting average was then adjusted by taking the geometrical mean of five contiguous rates, and the final result is inserted in column second of the table below.

In column third will be found the number of the living at every age in a stationary population according to the average rates of mortality, the basis of the table being 700,000 at the age of fifteen. These numbers are not however used in the subsequent calculations; but the logarithm of the living obtained by adding the logarithm of 70,000,000 to the logarithm of the chance of living for one year at every successive age from fifteen to the end of life, thus preserving all the fractions from one year to another.

The fourth column contains the expectation of life at every age. It agrees very closely with Farr's No. 2. At the earlier ages it is from a fifth to a tenth of a year higher, in middle life nearly the same, and at old age a little less:—

	Ages,	20.	30.	40.	50.	60.	70.	80.	90.
Farr's No. 2.....		39.99	33.21	26.48	19.87	13.60	8.55	4.97	2.80
The average.....		40.19	33.34	26.55	19.86	13.63	8.54	4.83	2.58
Gill's average.....		40.16	33.13	26.33	19.14	13.65	8.54	4.78	2.11

The next three columns contain the logarithms of the quantities usually styled D, N, and M, counting interest at four per cent, which will enable any one to use this average table for any of the purposes of life insurance. These have been carefully calculated in duplicate to secure accuracy, and the correctness of every result tested by obtaining from them the annual premiums in the eighth column by two independent methods. This is a severe test, and detects the smallest error. The first method used the living only at each age, and the second both the living and the dying. Thus, at the age of fifteen Log. D — Log. N gives for a natural number .0506889, and $v - 1$ being .0384615, the annual premium, which is the difference of these two, is .0122274. But Log. M — Log. N gives for a natural number .0122274 as the premium, which is the same as before. The work having been done in duplicate, and tested in this way at every age, the fullest confidence may be placed in the arithmetical accuracy of the calculations.

Column ninth contains the value of an annuity payable at the end of the year, corresponding to Mr. Milne's A. The proofs of all these tables have been very carefully read and compared with the original calculations.

Having now obtained what we regard as the most reliable life table, we will proceed in our next and last article to discuss the several modes of valuing life policies.

Age.	Mortality.	Living.	Expectat'n of life.	Logarithm of D.	Logarithm of N.	Logarithm of M.	Annual premium.	Value of annuity.
15.....	.00629	700000	43.74	7.5895979	8.8846848	6.9720190	.012227	18.729
	.00661	695397	43.01	7.5692243	8.8620933	6.9609916	.012557	18.601
17.....	.00690	690999	42.29	7.5499107	8.8393508	6.9496295	.012890	18.473
	.00718	686231	41.58	7.5298704	8.8164658	6.9379968	.013229	18.343
19.....	.00744	681304	40.88	7.5097076	8.7934057	6.9261207	.013574	18.218
	.00768	676235	40.19	7.4894310	8.7701977	6.9140443	.013927	18.088
21.....	.00791	671042	39.49	7.4690494	8.7468281	6.9016094	.014288	17.957
	.00812	665734	38.80	7.4485671	8.7232928	6.8894404	.014660	17.825
23.....	.00832	660328	38.11	7.4279929	8.6995869	6.8769765	.015045	17.689
	.00851	654834	37.48	7.4073319	8.6757045	6.8644410	.015443	17.551
25.....	.00869	649261	36.75	7.386561	8.6516393	6.8515661	.015857	17.410
	.00887	643619	36.06	7.3657623	8.6273844	6.8392439	.016268	17.265
27.....	.00905	637910	35.38	7.3448595	8.6029813	6.8266118	.016727	17.116
	.00924	632137	34.70	7.3238779	8.5782719	6.8139653	.017207	16.964
29.....	.00944	626296	34.02	7.3028131	8.5533966	6.8012968	.017697	16.807
	.00964	620384	33.34	7.2816605	8.5282955	6.7886056	.018210	16.645
31.....	.00985	614404	32.66	7.2604208	8.5029586	6.7758934	.018747	16.480
	.01007	608352	31.98	7.2390879	8.4773731	6.7631564	.019310	16.310
33.....	.01030	602296	31.30	7.2176591	8.4515304	6.7503897	.019900	16.124
	.01054	596293	30.62	7.1961494	8.4254144	6.7375885	.020520	15.954
35.....	.01080	589741	29.94	7.1744942	8.3990125	6.7247495	.021171	15.769
	.01107	583371	29.26	7.1527450	8.3723103	6.7118566	.021855	15.579
37.....	.01136	576914	28.58	7.1308772	8.3453921	6.6989066	.022574	15.384
	.01167	570360	27.91	7.1088821	8.3179409	6.6858879	.023332	15.183
39.....	.01199	563704	27.23	7.0867508	8.2902393	6.6727865	.024129	14.977
	.01228	556945	26.55	7.0644787	8.2621687	6.6595996	.024971	14.765
41.....	.01269	550078	25.88	7.0420573	8.2337079	6.6463190	.025859	14.547
	.01306	543097	25.21	7.0194774	8.2048349	6.6329337	.026798	14.323
43.....	.01345	536005	24.58	6.9967349	8.1756261	6.6194453	.027791	14.093
	.01386	528795	23.86	6.9737207	8.1457551	6.6058450	.028846	13.857
45.....	.01481	521466	23.19	6.9507259	8.1154935	6.5921257	.029966	13.614
	.01481	514004	22.52	6.9274880	8.0847100	6.5782612	.031157	13.364
47.....	.01536	506393	21.85	6.9039197	8.0533712	6.5642175	.032422	13.108
	.01598	498621	21.18	6.8801638	8.0214411	6.5498680	.033769	12.844
49.....	.01668	490645	20.52	6.8561344	7.9888810	6.5354497	.035202	12.575
	.01746	482462	19.86	6.8317959	7.9556497	6.5206286	.036760	12.300
51.....	.01832	474088	19.20	6.8071128	7.9217034	6.5054343	.038347	12.019
	.01928	465363	18.55	6.7820494	7.8869951	6.4896341	.040072	11.733
53.....	.02035	456881	17.91	6.7565010	7.8514741	6.4737615	.041857	11.448
	.02153	447694	17.27	6.7305986	7.8150826	6.4571506	.043695	11.148
55.....	.02285	437468	16.64	6.7041127	7.7777794	6.4399391	.045597	10.849
	.02432	427472	16.01	6.6770406	7.7394860	6.4220442	.048146	10.546
57.....	.02595	417076	15.40	6.6493147	7.7001435	6.4033799	.050494	10.243
	.02777	406258	14.80	6.6208626	7.6596688	6.3838569	.052968	9.935
59.....	.02977	394071	14.21	6.5915933	7.6180326	6.3633671	.055633	9.622
	.03197	382313	13.63	6.5614396	7.5751158	6.3418149	.058489	9.300
60.....	.03435	370961	13.06	6.5302951	7.5308511	6.3190989	.061410	9.013
	.03690	358219	12.51	6.4980815	7.4851549	6.2951158	.064560	8.707
62.....	.03962	345001	11.97	6.4647195	7.4370876	6.2698031	.067799	8.402
	.04251	331282	11.44	6.4301293	7.3850997	6.2438009	.071447	8.099
64.....	.04559	317247	10.92	6.3942301	7.3385346	6.2148764	.075321	7.796
	.04889	302783	10.42	6.3569318	7.2861237	6.1851068	.079247	7.496
66.....	.05243	287980	9.98	6.3181292	7.2317357	6.1536714	.083546	7.196
	.05632	272882	9.45	6.2777071	7.1752256	6.1204598	.088152	6.898
68.....	.06057	257513	8.99	6.2354966	7.1164818	6.0852936	.093061	6.602
	.06524	241915	8.54	6.1913296	7.0551803	6.0479917	.098358	6.309
70.....	.07032	226133	8.10	6.1449664	6.9912817	6.0083384	.104006	6.019
	.07601	210217	7.67	6.0962686	6.9245925	5.9669090	.110042	5.734
72.....	.08212	194239	7.26	6.0440025	6.85647154	5.9209924	.116487	5.454
	.08878	178268	6.87	5.9906551	6.7815988	5.8727993	.122867	5.179
74.....	.09601	162460	6.49	5.9332450	6.7049314	5.8212224	.130705	4.911
	.1039	146862	6.18	5.8728732	6.6244455	5.7659603	.138521	4.650
76.....	.1124	131603	5.78	5.8076984	6.5389547	5.7066545	.146825	4.397
	.1216	116811	5.45	5.7388893	6.4508597	5.6429781	.155687	4.158
78.....	.1315	102606	5.13	5.6655413	6.3571416	5.5745237	.164961	3.916
	.1421	89114	4.83	5.5872778	6.2583694	5.5090959	.174798	3.689
80.....	.1534	76451	4.55	5.5036811	6.1542009	5.4217078	.185143	3.472
	.1653	64723	4.28	5.4143261	6.0442841	5.3365048	.195984	3.265
82.....	.1777	54024	4.08	5.3188231	5.9282901	5.2449176	.207398	3.069

Age.	Mortality.	Living.	Expectat'n of life.	Logarithm of D.	Logarithm of N.	Logarithm of M.	Annual Value of premium annuity.
84.....	.1906	44424	3.80	5.2168201	5.8057527	5.1466142	.219211
85.....	.3040	85957	3.58	5.1078500	5.6768485	5.0412468	.281686
86.....	.3179	28622	3.37	4.9918297	5.5395833	4.9284627	.244838
87.....	.2323	22885	3.16	4.8660587	5.3949210	4.8078841	.238779
88.....	.2474	17115	2.96	4.7362168	5.2417150	4.6791295	.273788
89.....	.2637	12933	2.77	4.5957477	5.0791459	4.5416767	.290089
90.....	.2814	9528	2.58	4.4457692	4.9061599	4.3946592	.307968
91.....	.3007	6948	2.40	4.2852230	4.7214552	4.2870379	.327780
92.....	.3222	4785	2.22	4.1128582	4.5233787	4.0675871	.350113
93.....	.3468	3244	2.04	3.9269214	4.3097292	3.8845960	.375798
94.....	.3759	2119	1.85	3.7249343	4.0774793	3.6855904	.405612
95.....	.4119	1322	1.67	3.5031552	3.8224966	3.4668818	.440895
96.....	.4545	779	1.48	3.2560896	3.5890370	3.2228010	.482796
97.....	.5077	425	1.30	2.9758511	3.29191387	2.9455716	.532839
98.....	.5727	209	1.12	2.6510475	2.8514944	2.6287038	.591847
99.....	.6515	89	0.95	2.2647471	2.4193841	2.2402225	.669046
100.....	.7468	31	0.79	1.7899166	1.8957198	1.7680644	.745323
101.....	.8616	8	0.64	1.1763469	1.2306063	1.1569956	.844091
102.....	1.000	1	0.50	0.3004497	0.3004497	0.2854164	.961538

Art. IV.—CITY POPULATION.

ATLANTIC CITIES—POPULATION—RATIO OF GROWTH—OVERFLOW—BOSTON AND VICINAGE—MANUFACTURES—NEW YORK—INCREASE—METROPOLITAN RAILROADS—POPULATION BY WARDS—MOVEMENT OF BUSINESS—THIRD CITY OF THE WORLD—REAL ESTATE SPECULATIONS—EXTENSIVE RECOVERY—PROGRESS—DWELLINGS—CITY DIVISIONS—EFFECT OF RAILROADS—LOTS ON MANHATTAN ISLAND—DENSITY OF POPULATION—TENEMENT HOUSES—BROOKLYN—CITY RAILROADS—PHILADELPHIA—POPULATION BY WARDS—COMPARISON—NEWARK, N. J.—BALTIMORE—NEW ORLEANS—VALLEY CITIES—LAKE CITIES—INTERIOR CITIES—AGGREGATE OF THIRTY-FIVE CITIES—THE NORTHWEST—ATLANTIC CAPITAL—FUTURE PROGRESS.

THE comparative growth of cities is always an interesting branch of statistical research, and the late returns of the census give many important facts in relation to the leading cities of the Union. The enumerations of the leading Atlantic cities show the following results:—

	1810.	1820.	1830.	1840.	1850.	1860.
Boston.....	33,250	43,298	61,392	93,883	136,881	177,902
Providence	10,071	11,767	16,382	23,171	41,613	49,914
New York.....	96,373	123,706	202,589	312,710	515,547	821,113
Brooklyn.....	4,402	7,175	15,396	36,233	96,838	273,325
Newark.....	.....	6,507	10,958	17,290	38,894	72,055
Philadelphia...	111,210	137,097	188,961	258,087	408,762	568,034
Baltimore.....	35,387	62,738	80,625	102,313	169,054	218,012
Richmond.....	9,735	12,067	16,060	20,153	27,570	37,968
Washington....	8,208	13,247	18,827	23,364	40,001	61,440
Charleston.....	24,711	24,750	30,289	29,261	42,985	40,195
New Orleans ..	17,242	27,176	46,310	102,193	116,375	170,766
Savannah	5,215	7,523	7,776	11,214	15,312	16,000
Total.....	355,800	478,075	695,560	1,029,322	1,649,732	2,518,484

These aggregates show that the twelve cities named had five per cent of the whole population of the Union in 1810, and the proportion rose regularly to 6½ per cent in 1850, to 8½ per cent in 1860. In nearly all these cities, however, the population since the era of railroads has flowed over into the surrounding country, thus spreading the dwellings of those who carry on the business for which the city is important. In the neighborhood of Boston there are thirteen towns that are commanded by rail-

roads, and which contain the dwellings of Boston business men. The aggregate of Boston and those towns compared with the rest of the State is as follows:—

	1850.	1855.	1860.
Boston.....	136,881	161,429	177,902
Thirteen towns.....	76,683	97,193	117,492
Total.....	213,564	258,622	295,394
Rest of Massachusetts	780,950	864,420	938,102
Total Massachusetts....	994,514	1,123,042	1,231,496

Thus Boston may be said to contain one-fourth of the population of the State. The thirteen cities of Massachusetts have a population of 441,987, or 35 per cent of the whole population; in 1850 the same cities had a population of 324,845, or 33 $\frac{1}{2}$ per cent of the whole population. It is to be borne in mind, however, that the towns around Boston are those which concentrate the population the most rapidly, and one-third of the whole State population lives within a radius of twelve miles of Boston, dependent upon its commerce and manufactures.

The population and valuation of the city of New York have probably received the most marked development. The increase of the population from 1850 to 1860 nearly equaled the sum of the entire population in 1840. The progress of the population has, however, been in the upper part of the island, following the course of the railroads, which, since 1852, have so powerfully aided in the expansion of the city in a northerly direction. The following is a table from official sources of the population of each ward, according to the national census for each decade and the State census for the intermediate terms:—

POPULATION OF NEW YORK CITY.

Wards.	1830.	1835.	1840.	1845.	1850.	1855.	1860.
1....	11,831	10,380	10,629	12,230	19,754	18,468	18,120
2....	8,203	7,549	6,394	6,962	6,655	8,249	8,000
3....	9,599	10,884	11,581	11,900	10,355	7,909	3,757
4....	12,705	15,439	15,770	21,000	23,250	22,895	21,994
5....	17,722	18,495	19,159	20,362	22,686	21,617	22,341
6....	18,570	16,827	17,198	19,343	24,698	25,562	26,698
7....	15,873	21,481	22,982	25,558	32,690	34,422	40,006
8....	20,729	28,570	29,073	30,900	34,612	34,052	39,722
9....	22,810	20,618	24,795	30,907	40,657	39,982	44,866
10....	16,438	20,926	29,026	20,993	23,316	26,378	29,051
11....	14,915	26,845	17,052	27,259	43,758	52,979	59,663
12....	11,808	24,437	11,658	18,378	10,451	17,656	30,648
13....	12,598	17,130	18,517	22,411	28,246	26,597	32,917
14....	14,238	17,306	20,235	21,103	25,196	24,754	28,087
15....	.....	13,202	17,755	19,422	22,564	24,046	27,588
16....	.....	.....	22,273	40,350	52,882	39,823	45,183
17....	.....	.....	18,619	27,147	43,766	59,548	72,955
18....	.....	.....	.....	.....	31,546	39,415	57,464
19....	.....	.....	.....	.....	18,465	17,866	32,841
20....	.....	.....	.....	.....	.....	47,055	67,554
21....	.....	.....	.....	.....	.....	27,014	55,405
22....	.....	.....	.....	.....	.....	22,605	61,754
Total	202,569	270,089	312,710	371,223	515,547	629,810	821,113

In comparing the above figures, as they have been recorded in the respective years in which the estimates were made, it will be observed that the increase of the population in the up-town wards has been quite large, while that of some of the wards in the lower part of the city has considerably fallen off. Extension of business has required a corresponding extension of territory. Down-town limits have become circumscribed within the last five years. What was formerly the aristocratic resting places of solid old Knickerbockers has been occupied by the substantial warehouses of merchants. Westward the course of empire has taken its way, in truth; and if the progress continues as it has commenced a few years from now will see the whole of the lower portion of the city absorbed by trade, while the people will legitimately press upwards and develop the resources of the city in that direction. The ancient "up-town" has become the modern "down-town"—the old has given place to the new, and the time-honored monuments of old New York are rapidly crumbling away under the advancing footsteps of improvement.

From the foregoing table it may appear that the increase is not as great as is actually the case; but it is to be borne in mind that the estimates were made in June—a time when a large number of our citizens are absent in the country. It is fair to presume, therefore, that many thousands have been omitted from the census, and that if it were correct the number would be nearer nine hundred thousand than the number mentioned above. This being the case, New York occupies the third position in the cities of the world outside China and Japan, with which at the present moment London, Paris, and New York are not to be compared.

In 1830 there commenced that season of real estate speculation which carried property in the upper part of the island to exorbitant prices in 1836. The reaction then commenced, and the year 1843 gave the lowest point for real estate values. The general business of the city then began to recover, and the course was upward with a steady progress. The foreign famine of 1847-48 gave a great impulse to business, and being followed by large immigration and the successive opening of railroads, each adding to the city's business, as new lines of steamboats still further helped to concentrate business in New York. With the growth of business the population overflowed into Brooklyn, Williamsburg, New Jersey, and the river counties. By this operation the personal valuation of the city was checked, since persons living out of the city were not easily reached. The gold discoveries gave a new impulse to business, and the Crystal Palace of 1853 also lent its aid, while, in the same year, the introduction of Metropolitan roads at once, as it were, gave the means of spreading up town, and the upper part of the island was rapidly peopled. The Central Park added to the attraction in that direction. The dwellings of the wealthy portion of the population have migrated as regularly as the means of doing so have been extended. Thirty years since only 11,000 persons were to be found above Fourteenth-street, and the real estate valuation above that line was but \$3,674,980. If we now divide the island into three districts, viz.: below Canal-street; between Canal and Fourteenth-street; and above Fourteenth-street, and take the population and valuation of each district, we have results as follows for many periods:—

City Population.

	—Below Canal-street.—		—Canal to Fourteenth-st.—	
	Population.	Valuation.	Population.	Valuation.
1836.....	79,574	\$84,284,119	170,078	\$91,620,517
1843.....	91,797	71,908,308	225,708	78,829,609
1850.....	107,867	99,734,878	294,668	95,407,149
1855.....	94,718	112,920,377	268,210	94,530,899
1860.....	96,110	125,290,532	301,580	110,719,891

	—Above Fourteenth-st.—		—Total.—	
	Population.	Valuation.	Population.	Valuation.
1836.....	24,437	\$57,837,667	270,089	\$233,742,302
1843.....	53,728	19,212,599	371,233	164,950,514
1850.....	113,359	57,044,726	515,394	252,186,753
1855.....	271,882	120,524,590	629,810	336,975,866
1860.....	428,428	162,523,196	821,118	398,533,619

With the year 1836 the fictitious real estate valuation culminated, and prices declined over the whole island to the year 1843. From that time it rose again, but below Fourteenth-street. In the next five years the city railroads caused a positive decline of over 31,000 inhabitants between Canal and Fourteenth-street; and below Canal no doubt many went over to Brooklyn, thus leaving a decline of over 12,000 in this section. The rush "up-town" was so great in the five years that 158,000 persons were added to the number there, and the real estate more than doubled, while a decline took place between Canal and Fourteenth-streets. In the last five years the population of the lower part of the city has slightly recovered, while above Fourteenth-street 151,000 has again been added to the population, and \$40,000,000 to the real estate. This has been the effect of metropolitan railroads down the great avenues. In the same period railroads have spread over Brooklyn and Williamsburg, which are now united, and the population of both cities (New York and Brooklyn) is now 1,094,438, against 612,885 in 1850. The occupation of Manhattan Island goes on with this rapidity by means of the railroads that have greatly reduced the importance of distance from places of business.

Notwithstanding the immense size this city has reached, it has not as yet covered half its boundary; 54,725 lots have been built upon or otherwise improved, while there yet remains 86,761 vacant or unimproved lots. Probably fifty years will hardly pass before the latter will be improved; and if Brooklyn and its suburbs are in the meantime consolidated with this city, New York will become a metropolis scarcely less than London. The following shows the number of improved and unimproved or vacant lots in each ward:—

Wards.	Improved.	Unimproved.	Total.	Wards.	Improved.	Unimproved.	Total.
1.....	2,033	24	2,057	13.....	1,508	131	1,639
2.....	1,214	1	1,215	14.....	1,531	6	1,537
3.....	1,232	5	1,237	15.....	2,617	89	2,706
4.....	1,358	40	1,398	16.....	3,709	1,045	4,754
5.....	1,935	12	1,947	17.....	3,559	229	3,788
6.....	1,261	11	1,272	18.....	4,155	2,491	6,646
7.....	2,582	420	2,952	19.....	2,065	12,977	15,045
8.....	2,705	31	2,736	20.....	4,275	1,721	5,996
9.....	3,650	405	4,055	21.....	3,441	1,647	5,088
10.....	1,647	22	1,669	22.....	3,699	10,589	14,288
11.....	2,534	656	3,190				
12.....	2,062	54,289	56,301	Total...	54,725	86,761	141,486

The density of the population in the section crossing the island on a belt between Canal and Fourteenth-street has been largely increased, and tenement houses accommodate large numbers. These houses have of

late been built, to some extent, on improved plans, by which "all the modern improvements" are supplied to the occupants of rooms on reasonable terms. A late report of the Sanitary Association gives the following facts in relation to the occupancy of houses:—

Three years since the number of buildings of all descriptions in this city was some 53,000. The city is divided into twenty-two wards. In 1856, nineteen of these wards contained a population of 536,027 inhabitants, divided into 112,833 families, averaging a little less than five souls in each family. For the accommodation of these 112,833 families, residing in nineteen wards, there were 36,088 dwellings, averaging about three-and-one-half families occupying an entire house. There are but 12,717 of these family occupying an entire house; 7,148 of these dwellings contain two families; 4,600 contain each three families. Thus, while 24,465 of these dwellings shelter but 36,213 families, the remaining 13,623 houses have to cover 76,620 families, averaging nearly six families to each house, showing that about three-fourths of the whole population of New York live averaging but a fraction less than six families in a house, while only about one family in ten occupy a whole house. The following table will show how the families are apportioned to these dwellings:—

Containing families.	No. houses.	Containing families.	No. houses.	Containing families.	No. houses.	Containing families.	No. houses.
1 family	12,717	13 families	300	25 families	9	40 families	1
2 families	7,148	14 "	163	26 "	26	42 "	1
3 "	4,600	15 "	90	27 "	1	43 "	1
4 "	3,256	16 "	289	28 "	1	45 "	2
5 "	2,055	17 "	58	29 "	1	46 "	1
6 "	1,960	18 "	63	30 "	4	50 "	1
7 "	1,487	19 "	16	32 "	2	54 "	1
8 "	1,444	20 "	166	34 "	1	56 "	1
9 "	355	21 "	9	35 "	2	57 "	1
10 "	556	22 "	23	36 "	5	57 "	1
11 "	175	23 "	5	37 "	1	58 "	1
12 "	277	24 "	53	38 "	1		

There are many single blocks of dwellings containing twice the number of families residing on the whole of Fifth Avenue, or than a continuous row of dwellings similar to those on the Fifth Avenue three or four miles in length. There is a multitude of these squares, any of which contain a larger population than the whole city of Hartford, which covers an area of seven miles.

There are in Brooklyn 4,483 houses, which, according to the report of the superintendent of the police, have from three to one hundred persons each. The city railroads, as we have said, have been the means of extending the dwellings. There are five of these roads that run longitudinally from the Park to Harlem River, and these carried the following number of passengers in 1859:—

	No. passengers.	Receipts.		No. passengers.	Receipts.
Third Avenue	9,974,101	\$502,931	Harlem.....	3,493,113	281,983
Eighth "	7,589,997	379,500			
Sixth "	6,479,129	323,956	Total.....	32,718,351	\$1,730,556
Second "	5,182,011	262,166			

Thus, passages equal to more than the whole number of persons in the United States were made in those vehicles last year. Their effect has been doubtless to reduce the number of persons in single houses, by giving each family the command of a whole house for the same terms.

The population of Philadelphia has grown more rapidly than Boston, but the city has been, since 1854, made to embrace the whole county, and horse railroads have been availed of to an extent greater than any other city. Owing to the consolidation of the city and the new arrangement it is difficult to compare by wards with the former census. The present population is, however, as follows:—

POPULATION OF PHILADELPHIA.

Wards.		Wards.		Wards.	
1.....	37,078	11.....	16,717	21.....	17,164
2.....	28,097	12.....	16,811	22.....	17,288
3.....	19,916	13.....	20,132	23.....	24,093
4.....	23,633	14.....	24,336	24.....	23,791
5.....	24,838	15.....	32,431		
6.....	14,928	16.....	20,092	Pop. 1860...	568,034
7.....	31,397	17.....	23,328	" 1850...	408,762
8.....	27,811	18.....	20,470		
9.....	17,215	19.....	39,271	Inc. in 10 years.	159,272
10.....	21,967	20.....	39,152		

Until the year 1854, at which time consolidation went into effect, the city and county were separate. By the act of consolidation the city limits were extended over the entire county, and the last census includes this territory. Prior to 1790 there was no count made of the inhabitants in the rural portion of the county. In the figures given above only dwellings are included in the census of 1860, and no account is taken of stores, manufactories, work-shops, or public buildings. It follows that the people of Philadelphia are pretty well housed, when they have nearly 90,000 houses to shelter a population of 568,000 souls. There is no doubt that the population of the city is much larger than the figures returned by the Deputy United States Marshal would denote. The returns were collected in the summer, when, as in New York and Boston, very many families were absent from the city. Their houses being closed, the marshals were unable to obtain the desired statistics when they made their regular rounds, and thousands were missed in this way. An evidence of these serious omissions is furnished by the fact that the census returns give the number of deaths which occurred in the city during the year ending June 1st, 1860, as 6,076; while the records of the board of health prove that during that period the deaths really numbered 10,000.

The population of New York has increased far more rapidly than either Boston or Philadelphia, but it is the point of immigration from Europe. Boston and Philadelphia are both manufacturing cities, and the latter in that respect increases by far the most rapidly, because the manufacture is more distributed among individuals, and less under the control of corporations. The supply of raw materials, fuel, and water is abundant, and means of locomotion through horse railroads greater than in any other city.

In Philadelphia the average number of inmates to a house is about seven; in New York it is about fifteen. The numerous tenement houses of New York, in which hundreds of people are crowded, are unknown in Philadelphia, where nearly every family has a distinct domicile of its own. The facts we have stated show that, while New York has the larger population, Philadelphia has much the larger number of houses.

In 1820, that is, before the opening of the Erie Canal, Philadelphia was more populous than New York.

The population of Newark, N. J., rather more than doubled in the ten years to 1850, and in the last ten years it has again doubled under the influence of its manufacturing prosperity. It bears to New York something like the relation that Providence bears to Boston.

The population of Baltimore has increased in the last ten years less rapidly than in the previous decade, when it first felt the influence of the Baltimore and Ohio Railroad. Washington and Richmond also present a considerable increase, although they are not commercial cities. In Charleston there is an apparent aggregate decrease, but that is exclusively among the blacks. The white population has increased from 20,012 to 23,327, or more than 11 per cent. The city of New Orleans shows a large increase, greater in proportion than any other city, except New York. The growing wealth and trade of that city attracts thither great numbers, and the population is apparently more permanent than it formerly was. The great increase in the business of that city has been mainly from the river trade, which, drained from various directions on the great valley, has poured through the river cities to swell the volume of the New Orleans traffic. The principal cities of the rivers have increased as follows in population:—

CHIEF VALLEY CITIES.

	1810.	1820.	1830.	1840.	1850.	1860.
St. Louis.....	1,600	4,598	5,852	16,469	77,860	160,577
Louisville.....	1,357	4,012	10,341	21,210	43,194	70,226
Nashville.....	....	....	5,566	6,929	10,478	23,715
Cincinnati....	2,540	9,642	24,831	46,338	115,436	158,851
Pittsburg.....	4,768	7,248	12,568	21,115	46,601	48,804
Total.....	10,265	25,500	59,158	112,051	293,569	462,173

The five leading cities of the valley increased in the decade to 1850, during which the canals began to exert an influence on their trade, about 181,000 souls, of which the largest portion was in Cincinnati. In the last decade railroad building, land speculation, and immigration have all exerted an influence upon the tributary country, driving trade in upon each of those centers, and the increase has been 168,000 souls, of which the largest proportion is in St. Louis. But during the last ten years those cities have encountered a more active rivalry in the growth of the lake cities, which have successfully attracted a large portion of the business of the belt of country bounded by the lakes, the Ohio River, and the Mississippi River, by means of the railroads and the attraction of capital operating through those points.

CHIEF LAKE CITIES.

	1840.	1850.	1860.
Buffalo.....	18,213	42,261	81,541
Lockport.....	6,500	12,323	9,962
Cleveland.....	6,071	17,034	43,550
Detroit.....	9,102	21,019	46,824
Chicago.....	4,479	28,269	109,420
Milwaukee.....	1,700	20,061	45,826
Total.....	46,065	140,967	335,633

The increase in those cities has been, it appears, to 1840, 95,000 persons, of which increase Chicago, at the other end of the lakes, had

as large a share as Buffalo, at this end. In the last ten years the aggregate increase has been 194,700 souls, of which 81,000 has inured to Chicago, while Buffalo has increased but 39,000, or less than half the increase of Chicago. This great apparent prosperity of the former city has grown out of the immense concentration, not only of railroads at that point, but of the expenditure for railroad construction on a radius of 100 miles, all of which has reflected upon Chicago as a focus. That region is now to a considerable extent settled, and every year must add to the immense quantities of produce that will seek Chicago as the primary point of shipment. This growth of lake cities is very remarkable, and the more so if we compare it with the population of the prominent internal cities of the Atlantic States, where manufacturing may be assumed as the chief element of growth, as follows:—

	1840.	1850.	1860.		1840.	1850.	1860.
Worcester.....	7,497	17,049	24,963	Harrisburg ...	6,986	7,834	14,862
Bangor.....	8,627	14,332	16,499	Lancaster	8,417	12,869	17,642
Auburn.....	5,626	9,548	10,965	Reading.....	8,410	12,743	23,175
Rochester ...	20,191	36,408	48,096	Alexandria....	8,459	8,784	11,116
Utica.....	12,782	17,565	22,571	Wilmington. .	8,367	18,979	21,224
Canandaigua..	5,652	6,143	7,091				
Newburg.....	6,000	11,415	15,180	Total.....	101,014	171,112	233,784

The growth here presented has been but 62.672, or 36 per cent only in the last ten years. The whole growth of all the cities in the last twenty years have been as follows:—

	1840.	1850.	1860.	Increase per cent.
Twelve Atlantic cities	1,029,322	1,649,732	2,518,984	50
Five Valley "	112,051	298,569	462,173	58
Six Lake "	46,065	140,967	385,633	130
Twelve Interior "	101,914	171,112	233,784	36
Total growth.....	1,288,452	2,255,380	3,550,574	52

Thus the lake cities have shown by far the largest proportional increase, and the increase of the valley cities, as well as those of the Atlantic and the interior, has been in a declining ratio. The large railroad expenditure, migration, and speculative movement during the last ten years have made the lake country the focus of migration, and St. Louis has largely benefited by the same state of affairs, since the affluents that feed its trade have been swollen by the settlement and improvement of the whole northwest region. That region is now well supplied with rails, that will require a large production of grain and other produce to pay the interest on the cost of their construction, and their competition for the freights will no doubt reduce the rates of transportation to a *minimum*, and therefore favor the business of cities at their termini. The value of the produce will be governed, as a matter of course, by the state of the markets of sale. In other words, its value must fluctuate with the crops of Europe. The resources of that region are, however, equal to any demand, and it is, by the continued smoothing of the way to market, brought daily nearer to the European centers of demand.

The Atlantic cities, by reason of great attraction that the West has presented to the enterprising, were to some extent retarded of their growth. The effect of the new means of communication with the more thickly settled West must now be to make the Atlantic interests resume

their march. The Atlantic border is to a greater extent the owner of western roads, and the revenue of those roads, amounting, to those which center in Chicago alone, to some \$18,000,000 per annum, will be sent East with other large sums. The capital that so long set in a westerly current now sets East with accumulated interest, accompanied by the vast tide of yearly swelling produce. There is not likely to be a similar large absorption of capital in the building of railroads for the present, while every effort will be made to make those in operation profitable. Under the supposition that the \$160,000,000 which has been expended in western railroads shall be recovered through the operation of those roads, and become applicable to new enterprises, an abundant supply of capital may be fairly looked for in all the industries of the eastern cities, and their growth thus receive a new impulse, we may observe the city population gain gradually upon the aggregate. Thus the thirty-three cities enumerated held $7\frac{1}{2}$ per cent of the national population in 1840. In 1850 they contained $9\frac{1}{2}$ per cent, and in the present year they hold $11\frac{1}{2}$ per cent of the population of the Union. The city of New York, including Brooklyn, has gained most rapidly in that respect. A new impulse will in all probability now for a season be given to city accumulations, until one of those periodical revulsions again scatters the population upon the broad domain of the government.

JOURNAL OF MERCANTILE LAW.

APPEAL IN ADMIRALTY—CHARTER PARTY—LIEN.

In the United States Circuit Court.—October 30. Before Hon. Judge NELSON. Robert Latta vs. the cargo of the ship *Hermitage*.

NELSON, C. J.—The libel was filed in this case *in rem*. against the cargo of the vessel to recover a freight under a charter party. This charter party was entered also between the libellant and Messrs. ABRAUCHES, ALMEIDA & Co., merchants, for the employment of the vessel from the port of New York to the west coast of Africa, on a trading voyage, and back to New York, with the privilege of continuing the voyage for a year. The owner engaged to keep the vessel well fitted, tight, and staunch, and provided with every requisite necessary for such trading voyage, excepting captain, crew, and provisions, and that the whole vessel, (with the exception of the cabin, the deck, and necessary room for the accommodation of the crew and stowage of sails and cables,) would be at the sole use and disposal of the charterers, and that no goods or merchandise would be laden on board otherwise than from them, and the owner also bound himself to receive on board the vessel during the voyage, all such lawful goods and merchandise as the charterers might think proper to ship. The charterers engaged, on their part, to provide the vessel at all times with sufficient ballast, and to pay for charter or freight during the voyage \$450 per month, and all foreign and domestic port charges, &c., payable as follows:—\$800 at the expiration of every four months in New York, and in full on discharge of vessel. The charters to commence when in her berth for loading and reported to charterers, and cease when the vessel shall have returned and discharged her cargo in New York. For the fulfillment of the several stipulations each party bound himself to the other—the one the ship and tackle, the other the merchandise laden on board. The cargo was put on board the vessel in this port by the charterers preparatory to the voyage, but before she started on her voyage a question arose upon the construction of the charter, or rather in respect to the rights of the charterers

under it; the latter claiming the cabin for the accommodation of passengers to be received on board, which was denied by the owner, and thereupon the charterers commenced taking out the cargo and refused to go on with the charter party. This libel is filed to recover freight for the use of the vessel for the time engaged, and damages for the non-fulfilment of the charter party. The case does not fall within that class of cases where nothing has been done under charter of the vessel, that is, no goods placed on board, nor the voyage entered upon, in which there can be no lien upon the vessel or cargo under the charter party. In these cases, whether the breach of the agreement is on the part of the owner, or of the charterer, there can be no proceeding *in rem.* against vessel or cargo, as no lien has attached for the benefit of either party. For here the voyage had commenced upon the very terms of the agreement between the parties, the goods were put on board the vessel, and, if the lien attached at all, attached as soon as they were laden on board; and so far as the form of the remedy is conceived, it is the same as if the voyage had been broken up by the charterers at any other point in the course of the voyage, after the vessel had been out a week, month, or longer. The real question, therefore, in the case, is whether the claim set up by the charterers to put passengers on board to occupy the cabin was well founded. If it was, then the refusal was a breach of the charter, and the charterers had a right to put an end to the contract. If not, they were in fault, and the cargo is chargeable for freight and damages. Now, the charter, which is a very special and well drawn instrument, clear and readily understood in every part of it, in terms reserves the cabin. It is insisted, however, that this is a mistake, and is inconsistent with other parts of the instrument, and that without the use of the cabin to the charterers, the voyage could not be performed, and thus the reservation would defeat the contract. But if there has been any mistake in the charter, or if its terms do not express the intent of the parties, there is another mode of settling the question than calling on the court in this proceeding to disregard its clear and undoubted meaning, and that is, to institute a proceeding to reform the contract. And as to the objection that the clear words of the charter would necessarily defeat the whole object of it, and purpose of the parties in entering into it, we are unable to see this consequence. We do not think the reservation necessarily excludes the master from the cabin, for, although he is appointed by the charterers, he was, in a qualified sense, the master of the owner. The owner had duties to perform in respect to the vessel, and some of them approximately belonging to the master, and in which he, as master, was specially concerned. In our construction of the charter, the possession of the vessel was not to be exclusively in the charterers, not so as admitted by the terms of the instrument, nor necessarily so, in any judgment, regarding the nature and purpose of the voyage. This is our view upon the words and by the parties to the contract, and we must look to them in endeavoring to ascertain their meaning. As it respects the lien upon the cargo on board, the charter is express—so, upon the vessel, if the breach of the contract had been on the part of the owner. The decree below reversed and decree for libellant with reference to clerk to ascertain the freight and damages.

REVENUE PROTEST—IMPORTANT TO IMPORTERS.

In the United States Circuit Court.—October 31. Before Hon. Judge NELSON. *Greene C. Bronson vs. John G. Boker, et al.*

NELSON, C. J.—The principal question in this case is whether or not the protest is sufficiently explicit within the requirements of the act of Congress. The words are, that before making payment of the duties the importer must protest in writing, signed by him or his agent, setting forth distinctly and specifically the grounds of objection to the payment of the duties. In *Greely and Burgess*, (18 Howard, 410,) the following words were held sufficient to take an objection on the trial that the appraisers had not made the proper examination of the goods from the several packages as required by the act:—"That the goods were not fairly and faithfully examined by the appraisers." In that case the article

imported was sugar from Cuba, and the samples upon which the assessment was made had been drawn from the casks and exposed for some time to the air, and would not afford a true criterion by which to judge of the value. The majority of the judges were of the opinion that the protest was sufficiently specific to cover this objection. In the present case the question of appraisal arises in regard to an importation of liquors, and the objection is that the examination was defective in not examining samples from the stated number of packages required, and also that neither packages nor samples were examined by the appraisers. The words in the protest are claimed to cover the objection, and because the appraisers "had not used or employed a sufficient means, or made sufficient examination of said brandies" to determine their value. It may be sufficient to distinguish this case, so far as the sufficiency of the protest is concerned, from the case above referred to; but the words in the connection found could afford but little information to the Collector of the real ground of the objection. They are found among a mass of objections covering almost every one that can arise under the revenue laws, and extending over some sheets of foolscap. Certainly the Collector would be obliged to go over the entire process of carrying goods through the Custom-house in every instance of entry, in order to meet the almost countless objections enumerated on this paper. The protest seems to have been without reference to any specific objection, but with a view to hit any that might happen in the course of levying the duties. We think the departure from the strict construction of the act, in the case above referred to, has led to this general and indefinite statement of the objections, and that it may be necessary for Congress to interfere and correct the abuse. The trial in this case was embarrassed on account of the loss of the papers in the Custom-house, and it is exceedingly doubtful if the truth of the transaction appeared on the trial, for the want of the proper preparation of the defence. We shall grant a new trial, with an order to enable the government to furnish the proper evidence, if in their power, but it must be on terms, on payment of the costs of the last circuit.

COMMERCIAL CHRONICLE AND REVIEW.

PERIODICAL DISTURBANCES—CREDIT SYSTEM—INCREASED CAUTION—PANIC OF 1857—POLITICAL EVENTS—RENEWED DISTRUST—ELEMENTS OF PROSPERITY—CHEAPNESS OF MONEY—FOREIGN BALANCES—SPECIE IN THE CITY—RESOURCES OF THE WEST—PRESIDENTIAL ELECTION—BANK CURTAILMENT—DANGER OF SUSPENSION—REDEMPTING BANKS—LOW RATE OF BILLS—MEETING OF BANK OFFICERS—EXCHANGE COMMITTEE—CLEARING-HOUSE EXCHANGES—BOSTON BANKS—SOUTHERN BANKS—SPECIE—EXPANSE OF LOANS—INTERNAL EXCHANGES—CROP MOVEMENT—RATES OF MONEY—EXCHANGE—LOWER RATES—MONEY IN ENGLAND—BANK OF FRANCE—DRAINS FOR COIN—SILVER IN BANK OF FRANCE—GOLD FOR AMERICA—STOCK QUOTATION—SPECIE MOVEMENT—LOSS OF THE CITY.

THE disturbances which from various causes periodically overtake the financial world seem of late to have increased in frequency and intensity, and it may be owing in some degree to the fact that commercial men have come to be more thoroughly convinced of the precarious nature of the credit system, on which a very large portion of the business of the country is conducted. The knowledge that so many business men incur obligations to an aggregate of which their real capital proves but comparatively a small per cent, induces all to seek safety by contraction at the very first sign of trouble, real or imaginary. The commercial enterprises are apparently like a fleet of the little Nautilus, which, on the smooth sea, rise and spread a tiny sail, but at the first ripple all collapse and sink to the bottom for safety. The effects of the panic of 1857 had hardly passed out of the market, and houses tainted with extension had just recovered a little strength, when the course of political events again, as it were in advance, prostrated credit

by awakening political fears. The result was worse for those who had outstanding obligations than at any former crisis up to that time. All the elements of a season of the greatest prosperity existed in all parts of the country. The largest cotton crop ever known had sold well; the agricultural crops were abundant, with prospects of large sales; the raw materials of manufacture were in good supply, capital cheap, and labor plentiful. The cheapness of money through the summer had enabled importers to remit not only in full but in advance, and the supply of bills, against increased shipments of breadstuffs, was such as to reduce the rate of sterling to a point unusually low for the season, affording an indication that the balance due Europe was less than is generally the case in the autumn. As a consequence the export of specie had nearly ceased, and the amount in the city had accumulated to \$27,834,000, Nov. 3, being \$3,000,000 more than for the same date of the previous year. The government 5's were at three per cent premium, and all State stocks commanded high rates. The Western banks, in order to move the breadstuffs, had increased their circulation, and to do so had been large purchasers of State stocks. The prospect was then that all that Western country, which had been so long under a cloud, would become large purchasers of goods in the spring, in addition to the large probable wants of the South. Manufacturers and importers were preparing to supply that anticipated demand which should swell the receipts of railroads and make good the revenues of the government, while raising freights and restoring value to shipping. Under such circumstances capital circulated freely, and if there was any drawback it was in the condition of Europe, whose wants of food might possibly detract from the value of cotton. In this state of affairs the results of the Presidential election came with a blight upon the market. Threats of disunion caused an alarm to which the banks were the first to give practical effect by curtailing their discounts at the time when the community required expansion. The banks at the South first refused to discount the usual cotton drafts payable after the 1st of November. The New York banks at once held up their lines of discounts, the money pressure became intense, sterling bills could not be sold, houses under Western drafts were thus heavily embarrassed, and exchange all over the country rose rapidly on New York. All the wheels of commerce were becoming clogged, and the danger of a general suspension of the merchants was imminent. The banks could not hope to stand up against such a catastrophe. Some mode of action was indispensable. In 1857 similar difficulties were increased by a panic in country money, caused by the failure of banks and brokers connected with the Ohio Life and Trust Company. The pressure of the country money upon the redeeming banks in New York forced curtailment upon them to an extent that made them creditors at the Clearing-house, thus compelling the other banks to follow in the same direction, notwithstanding repeated promises of expansion made to the public. The merchants and depositors becoming exasperated drew their deposits and extinguished the banks in suspension. In the present case the uncurrent money pressure did not occur, but the point was to relieve the exchange markets, and allow the banks to extend their loans to customers, by relieving them from the liability to pay specie at the clearing-house for the balances that might there arise against them. For this purpose, at a meeting of bank officers, a committee was appointed to buy

\$2,500,000 of sterling exchange. The effect of this was to bring a great many private buyers into the market, and the committee did not get the whole amount, and on the 21st of November the bank officers held a meeting, the proceedings of which will be found under another head. The result was to appoint a committee of five who should receive from each bank on deposit bills receivable, United States stocks or treasury notes, or New York stocks, and to issue certificates, bearing 7 per cent, of the denomination of \$5,000 and \$10,000, to an aggregate of \$5,000,000. Those certificates to be taken in payment of balances instead of specie—the amount of which in all the banks was to be made a common fund. To this all the banks assented except the Chemical. Thus armed, the banks were not only to extend their discounts to the merchants, but to aid other cities by not drawing specie for balances due. The Boston banks, following the same plan, extended their limit of bills taken at the clearing-house in settlement of balances instead of specie, from \$500 to a range from \$10,000 to \$100,000, according to the capital of the bank tendering them. Being thus relieved from mutual demands for specie, if the New York banks would refrain from drawing, they could get along. The banks at the South having suspended, with the exception of those at New Orleans, and the foreign exchanges requiring no specie, there was apparently no demand, nevertheless the amount in New York fell from \$27,834,100, Nov. 3, to \$21,688,000, Dec. 8, or \$6,146,000, in addition to \$4,063,049 received from California, making, together, \$10,209,049 that disappeared. Many of the banks, in accordance with mutual agreement, extended their loans, which have, as seen in the table of weekly returns hereto annexed, risen some millions. It is very evident that the whole of this operation was a virtual suspension of specie payments, and was favored by the absence of any export demand for specie at the moment. Its practical effect was temporary. The operation was based on the belief that the assets of the merchants who owe the banks are good and collectable; that as soon as the exchange machinery, by which the produce finds its way to market, is again in operation, the country would again pay up, and the new loans would “run off” under the operation of those payments. The more so that most business enterprises came to a stand, orders for goods were countermanded, manufacturers rapidly curtailed and discharged hands, and every branch of business that would require money was curtailed—no new paper being made—and every day bringing with it some payments, an inevitable fall in the value of money, signifying complete stagnation of business, was likely to take place.

The rates of currency and checks on leading points were as follows, showing the difficulty that was to be encountered in the collection of those debts which are depended upon to meet debts due banks:—

	Checks.	Currency.		Checks.	Currency.
Boston	$\frac{1}{2}$	$\frac{1}{2}$ a $\frac{1}{2}$	Chicago	12	12 a 15
Philadelphia	$2\frac{1}{2}$	$2\frac{1}{2}$ a 8	St. Louis	12	12 a 15
Baltimore	4	$4\frac{1}{2}$ a ..	Detroit	2	2 a ..
Virginia .....	..	9 a 10	Cincinnati	2	$2\frac{1}{2}$ a 3
South Carolina .....	..	9 a 10	New Orleans	$3\frac{1}{2}$	4 a ..

These rates were a serious drawback upon collections, and the derangement of the exchanges, preventing the movement of the crops which accumulated at many points. There was every appearance of a “lock up,” although they in-

creased the mutual exchange rates to \$10,000,000, and the measures of the banks gave but little relief. The best paper was discounted, and no new paper was made; but the large mass that was pressing for money was of a character that the banks scrutinized. The rates of money, under these conflicting elements, were very variable, ranging as follows:—

	On call.		Indorsed.		Single names.	Other good.	Not well known.
	Stocks.	Other.	60 days.	4 & 6 mos.			
Jan. 1st, 1859.	4 a 4½	4 a 5	4 a 5	5 a 6	6 a 7	7 a 8	8 a 10
Feb. 1st.....	5 a 6	6 a 7	5 a 6	6 a 7	7 a 7½	8 a 9	9 a 10
Mar. 1st.....	4 a 5	4½ a 6	4½ a 5½	5½ a 6½	6 a 7	7 a 8	9 a 10
Apr. 1st.....	4 a 5	5 a 6	5 a 5½	6 a 6½	6½ a 7	8 a 9	9 a 10
May 1st.....	5 a 6	6 a 7	6 a 6½	6½ a 6	7 a 9	9 a 10	10 a 12
Jun. 1st.....	6 a 7	7 a 8	6½ a 7	7 a 8	8 a 9	9 a 10	10 a 12
July 1st.....	5 a 6	6 a 7	6½ a 7	7 a 7½	8 a 9	10 a 12	12 a 15
Aug. 1st.....	6 a 7	7 a 8	6½ a 7½	7 a 8	8 a 9	11 a 13	12 a 15
Sept. 1st.....	5½ a 6	7 a 8	6 a 7	7 a 7½	8 a 8½	11 a 14	12 a 16
Oct. 1st.....	5½ a 7	6 a 7	6½ a 7	7 a 8	8 a 9	10 a 12	12 a 18
Nov. 1st.....	5 a 5½	6 a 7	6½ a 7½	7½ a 8	8½ a 9½	12 a 15	12 a 18
Dec. 1st.....	5 a 5½	6 a 7	6 a 7	7 a 8½	8 a 9	9 a 10	12 a 18
Dec. 17th.....	5½ a 6	6 a 7	7 a 7½	7½ a 8½	8 a 9	9 a 10	12 a 18
Jan. 1st, 1860..	6 a 6½	6½ a 7	7 a 7½	7½ a 8½	7½ a 8	9 a 10	12 a 18
Jan. 15th.....	7 a 7½	7 a 7½	8½ a 9	9 a 9½	9 a 10	10 a 11	15 a 20
Feb. 1st.....	6 a 6½	7 a 7½	8½ a 9	9 a 9½	9 a 10	11 a 12	15 a 20
Feb. 15th.....	5 a 6	6 a 7	7 a 7½	7½ a 8	8½ a 9½	10 a 12	15 a 18
Mar. 1st.....	5½ a 6	6 a 7	7 a 7½	7½ a 8	8½ a 9½	10 a 12	15 a 18
Mar. 15th.....	5 a 5½	5½ a 6	6 a 7	7½ a 8	8½ a 9½	10 a 12	15 a 18
Apr. 1st.....	5 a 5½	6 a 6½	5½ a 6	6 a 6½	5½ a 7½	9 a 10	11 a 13
Apr. 15th.....	5 a 5½	6 a 6½	5½ a 6	6 a 6½	6½ a 7½	9 a 10	11 a 13
May 1st.....	5 a 5½	6 a 6½	5 a 6	6 a 6½	6½ a 7½	9 a 10	11 a 12
May 15th.....	5 a 6	6 a 6½	5 a 6	6 a 7	6½ a 7½	9 a 10	10 a 12
June 1st.....	4½ a 5	6 a 6½	5 a 6	6 a 7	6½ a 7½	8 a 9	9 a 10
June 15th.....	4½ a 5	5 a 6	4½ a 5	5 a 5½	5½ a 6	6 a 7½	8 a 9
July 1st.....	5 a 5½	5½ a 6	.. a 5	5 a 6	5½ a 6	7 a 7½	8 a 9
July 15th.....	5 a 5½	5½ a 6	.. a 5	5 a 6	5½ a 6	7 a 7½	8 a 9
Aug. 1st.....	5 a 6	6 a 7	5 a 6	6 a 6½	6½ a 7	7½ a 8½	9 a 10
Aug. 15th.....	5½ a 6	6 a 7	6 a 6½	6 a 7	6½ a 7½	8 a 9	9 a 10
Sept. 1st.....	6 a 7	7 a 9	6½ a 7	7 a 9	8 a 9	9 a 12	12 a 24
Sept. 15th.....	6 a 7	6½ a 7	7 a 7½	7½ a 8	6½ a 7½	9 a 9½	10 a 10½
Oct. 1st.....	6½ a 7	7 a 8	6½ a 7	6½ a 7½	8 a 8½	9 a 10	12 a 20
Oct. 15th.....	6½ a 7	7 a 8	6½ a 7	6½ a 7½	8 a 8½	9 a 10	12 a 20
Nov. 1st.....	6½ a 7	7 a 8	6½ a 7	7 a 7½	8 a 9	10 a 12	12 a 15
Nov. 15th.....	7 a 8	7 a 9	8 a 9	9 a 10	9 a 12	14 a 15	15 a 24
Dec. 1st.....	7 a 9	9 a 10	10 a 12	12 a 15	15 a 18	24 a 36	.. a ..
Dec. 15th.....	6 a 7	9 a 11	12 a 15	15 a 18	20 a ..	.. a ..	.. a ..

The call loans were of course for the best securities at good margins, and the rates for paper were without much regular classification; those who generally deal in commercial paper having, to some extent, withdrawn from the market. The difficulty was not that money was scarce, but that there was no disposition to lend. The rates of exchange present similar features to a very extraordinary extent, being as follows:—

RATES OF BILLS IN NEW YORK.

	London.	Paris.	Amsterdam.	Frankfort.	Hamburg.	Berlin.
Jan. 1..	9 a 9½	5.18½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	78 a 78½
15..	8½ a 9	5.21½ a 5.18½	41½ a 41½	41½ a 41½	36½ a 36½	78½ a 78½
Feb. 1..	8½ a 9	5.18½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	78½ a 78½
15..	8½ a 9	5.18½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	78½ a 78½
Mar. 1..	8½ a 9	5.17½ a 5.15	41½ a 41½	41½ a 41½	36½ a 36½	78½ a 78½
15..	8½ a 8½	5.17½ a 5.15½	41½ a 41½	41½ a 41½	36½ a 36½	78½ a 78½
Apr. 1..	8½ a 8½	5.18½ a 5.16½	41½ a 41½	41½ a 41½	36½ a 36½	78½ a 78½
15..	8½ a 8½	5.16½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	78½ a 78½

	London.	Paris.	Amsterdam.	Frankfort.	Hamburg.	Bremen.
May 1..	9½ a 9½	5.18½ a 5.12½	41½ a 41½	41½ a 42	36½ a 36½	73½ a 73½
15..	9½ a 9½	5.18½ a 5.18½	41½ a 41½	41½ a 42	36½ a 37	73½ a 73½
Jun. 1..	9½ a 9½	5.18½ a 5.12½	41½ a 41½	41½ a 42	37 a 37½	73½ a 73½
15..	9½ a 9½	5.18½ a 5.12½	41½ a 41½	41½ a 42	36½ a 37½	73½ a 73½
July 1..	9½ a 9½	5.18½ a 5.18½	41½ a 41½	41½ a 42	36½ a 37	73½ a 73½
15..	9½ a 9½	5.18½ a 5.18½	41½ a 41½	41½ a 41½	36½ a 37	73½ a 73½
Aug. 1..	9½ a 9½	5.18½ a 5.18½	41½ a 41½	41½ a 42	36½ a 37	73½ a 73½
15..	9½ a 10	5.18½ a 5.18½	41½ a 41½	41½ a 42	36½ a 37½	73½ a 73½
Sep. 1..	9½ a 10	5.14½ a 5.18½	41½ a 41½	41½ a 42	36½ a 37	73½ a 73½
15..	9½ a 9½	5.14½ a 5.18½	41½ a 41½	41½ a 42	36½ a 36½	73½ a 73½
Oct. 1..	9½ a 9½	5.15½ a 5.14½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
15..	8½ a 9	5.17½ a 5.15½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
Nov. 1..	8 a 8½	5.20 a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	72 a 72
15..	5 a 6½	5.20 a 5.23½	40½ a 40½	40½ a 41½	35½ a 36½	72½ a 72½
Dec. 1..	1 a 5	5.47½ a 5.40	39½ a 40½	40 a 40½	34½ a 35½	69½ a 76½
15..	1 a 4	5.60 a 5.60	39 a 39½	39 a 39½	34½ a 34½	72½ a 78½

The quotations were for the leading names—document bills, or those drawn against produce with bills lading attached, were 97 a 98, at which rates business was scarcely possible, in face of weak markets abroad. These lower rates in usual times would attract remittances, or those who have to pay for goods abroad, but these had mostly made their remittances, and there was nothing to support the market. The maturity of those bills brought gold from Europe at a profit, but the moment for such an operation was very inauspicious, since the drain of gold for corn and war expenses had produced uneasiness and caused a rise in the rate of interest in London from 4½, Nov. 8, to 6, Nov. 13, about which time the Bank of England loaned to the Bank of France £2,000,000 of gold on deposit of £2,000,000 of silver. By this transaction it was revealed that the \$85,000,000 specie held by the Bank of France is nearly all silver, while the demand upon the bank was for gold. Rather than pay out the silver, or sell it for gold, either of which measures would have led to disturbance, recourse was had to pledging it with the Bank of England for gold. This transaction it was hoped would remove uneasiness and induce a decline in interest; but immediately following came the disastrous news from New York, which involved not only a cutting off of the receipts of gold thence, but caused a new and unexpected drain. The news was also of a character to affect disastrously American credit, since it showed a decline of 13 per cent in United States government stocks, solely from fear of disunion, which event would reduce the States to the condition of the bankrupt, "disorderly houses" of South America, and leave the separate States a prey to every spoiler. The quotation of United States stocks were as follows:—

	6's, 1868.	5's, 1874.	5's, 1865.	Virginia.	Tennessee.	Missouri.
September 30.....	110	103	105	91	91	82
December 10.	95	89	92	78	66	62

The first news from the United States, however, produced little effect upon the London market, although about \$2,000,000 gold was immediately shipped for New York.

Such a prospect was likely to cause a reflux of securities to the United States, and the more so that Mr. Grow, of the dominant party in the House of Representatives, refused to pledge the public lands, or give any security for the outstanding public debt. The discredit thus attached to American credit by no means favored a speedy return of confidence in bills. The specie movement was as follows:—

GOLD RECEIVED FROM CALIFORNIA AND EXPORTED FROM NEW YORK WEEKLY, WITH THE AMOUNT OF SPECIE IN SUB-TREASURY, AND THE TOTAL IN THE CITY.

	1859.		1860.		
	Received.	Exported.	Received.	Exported.	Specie in sub-treasury. Total in the city.
Jan. 7.....		\$1,052,558		\$85,080	\$7,737,965 \$25,600,699
14.....	\$1,376,300	218,049	1,788,666	88,482	7,729,646 26,470,512
21.....		567,398		259,400	8,352,485 27,585,970
28.....	1,210,713	467,694	1,760,582	81,800	8,957,123 29,020,862
Feb. 4.....		606,969	94,569	427,457	9,010,569 28,984,870
11.....	1,319,923	361,550	1,476,621	92,350	9,676,732 29,464,299
18.....		1,013,780		592,997	10,012,572 30,603,762
26.....	1,287,967	358,554	1,398,179	202,000	8,955,203 29,729,199
Mar. 3.....		1,427,556	382,503	667,282	8,734,028 31,820,840
10.....	933,130	307,106	1,198,711	115,473	8,287,909 30,139,089
17.....		870,578	152,000	429,260	8,099,409 31,271,247
24.....		208,955	895,336	465,115	8,122,672 31,408,876
31.....	1,032,314	1,343,059	155,110	706,006	8,026,492 31,447,251
Apr. 7.....		576,107		310,088	7,562,885 30,162,017
14.....	1,404,210	1,637,104	1,146,211	630,010	7,714,000 31,640,982
21.....		1,496,889		241,503	7,581,483 30,764,897
28.....	1,723,352	1,680,743	1,455,337	1,774,767	7,668,723 30,848,532
May 5.....		2,169,197		2,355,117	7,041,143 30,856,889
12.....	1,480,115	1,926,491	1,382,753	833,881	6,539,414 29,319,801
19.....		2,223,578		1,251,177	6,864,148 30,599,341
26.....	1,938,669	5,126,643	1,519,703	1,317,773	6,982,660 30,414,437
June 2.....		2,325,972		1,719,188	6,621,100 31,196,553
9.....	1,513,978	1,877,294		1,542,466	6,620,622 30,406,203
16.....		1,669,263	1,385,652	2,526,478	6,426,755 30,537,000
22.....		1,620,731		1,417,757	6,826,894 29,677,815
29.....	2,041,237	1,861,163	1,541,580	1,962,776	6,253,357 28,717,607
July 9.....		1,398,885		1,166,773	5,187,468 27,939,162
14.....	1,736,861	2,495,127	1,514,884	1,283,135	5,404,367 28,156,061
21.....		2,030,220	673,290	1,624,280	5,432,789 28,376,433
28.....	2,145,000	2,344,040		1,880,497	5,112,942 28,212,668
Aug 4.....		1,284,855	988,676	1,739,259	5,559,922 27,688,011
11.....	1,860,274	1,505,389	1,006,283	1,357,198	5,732,534 27,312,274
18.....		1,594,933		2,183,281	5,902,350 26,911,000
25.....	2,126,332	1,584,879	798,832	1,730,696	5,985,545 26,105,279
Sept. 1.....	*962,030	509,649	950,000	1,302,266	5,607,627 24,642,700
8.....	2,046,006	2,363,385		1,198,893	5,333,650 24,721,300
15.....		1,760,331	791,660	1,088,923	5,636,367 24,597,300
22.....	2,042,363	2,727,194		533,843	5,448,804 24,435,400
29.....		1,414,590	1,202,657	900,700	5,223,432 25,400,400
Oct. 7.....	†2,850,670	727,981		689,419	4,991,575 25,139,800
15.....	1,883,670	1,430,833	1,971,645	16,679	4,496,881 24,770,669
20.....		1,109,603	810,225	1,033,439	4,554,642 26,669,870
27.....	1,871,554	2,059,492		361,808	4,887,003 27,685,500
Nov. 3.....		1,519,673	1,241,939	1,188,750	5,636,258 27,334,100
10.....	1,563,107	1,068,407		195,320	5,733,746 26,862,100
17.....		1,300,991	911,620	138,700	5,018,564 24,482,974
24.....	1,721,342	none.	1,087,071	13,443	4,308,668 23,068,041
Dec. 1.....		940,201	822,419	86,350	3,702,751 22,244,513
8.....	1,869,429	675,697		44,023	3,125,300 21,688,043
Total.....	41,345,436	68,775,583	32,480,035	41,701,274	.....

In this return we observe that, while the exports were far less than last year, the receipts of gold exceeded them by \$3,395,963, notwithstanding which the amount in the city fell to \$6,146,037, making about \$10,000,000 that disappeared,

* From New Orleans.

† \$300,000 silver from Mexico.

and the weekly table of bank returns annexed shows that the banks of neighboring cities also reduced their coin. The operations of the New York assay-office did a much larger business for the month than usual, and the amount there deposited was mostly ordered into coin, which fact produced greater activity at the Philadelphia mint, where the coinage of the present year has been very large as compared with last year :—

NEW YORK ASSAY OFFICE.

	Foreign.				United States.				Payments in	
	Gold. Coin.	Bullion.	Silver. Coin.	Bullion.	Gold. Coin.	Silver. Coin.	Bullion.	Silver. Coin.	Bars.	Coin.
Jan. 14,000	18,000	11,200	14,000	2,478,000	1,800	20,000	647,000	1,910,000		
Feb. 5,000	28,000	6,500	24,000	951,000	....	7,500	932,000	90,000		
Mar. 8,000	15,000	23,400	5,500	267,000	1,100	2,500	180,000	142,500		
Apr. 8,000	32,000	14,500	10,000	183,000	3,700	3,800	187,000	70,000		
May 11,200	20,800	25,500	18,000	176,000	7,000	16,500	230,000	45,000		
June 12,000	19,000	10,000	4,000	147,000	1,750	2,750	158,000	38,500		
July 9,500	18,000	12,800	8,000	159,500	1,200	3,000	140,000	72,000		
Aug. 12,000	14,000	16,000	14,100	208,000	1,000	3,900	190,000	79,000		
Sept. 13,000	41,000	7,500	14,000	323,000	....	8,500	350,000	57,000		
Oct. 7,000	10,000	6,400	38,000	1,183,000	1,000	12,600	800,000	958,000		
Nov. 14,000	13,000	30,800	9,000	3,423,000	....	27,000	67,000	3,500,000		
Tot. 113,700	122,800	164,600	58,600	9,498,500	18,550	110,250	3,381,000	8,259,000		
'59 115,000	122,000	430,580	70,900	2,930,600	13,900	83,320	2,971,000	1,297,100		

UNITED STATES MINT, PHILADELPHIA.

	Deposits.		Coinage.			Total
	Gold.	Silver.	Gold.	Silver.	Cents.	
January.....	\$200,000	\$41,000	\$1,024,563	\$41,000	\$24,000	\$1,090,563
February.....	1,838,578	35,573	1,632,160	21,600	24,000	1,877,760
March.....	144,478	82,255	317,451	132,989	29,000	479,440
April.....	281,891	49,764	252,756	88,431	30,000	321,188
May.....	90,828	72,463	133,004	81,100	35,000	249,104
June.....	54,893	54,676	63,718	97,160	24,000	184,878
July.....	97,041	14,181	101,975	87,000	16,660	205,635
August.....	132,138	22,741	No coinage.			
September...	2,174,100	29,537	2,181,460	36,000	4,000	2,221,460
October.....	457,750	45,829	357,373	54,673	10,000	422,049
November.....	1,623,579	19,320	1,580,640	30,700	11,000	1,622,340
Total, 1860...	\$7,915,268	\$477,324	\$7,545,091	\$620,559	\$207,660	\$9,086,422
Total, 1859...	1,381,753	850,927	1,282,219	790,996	323,000	4,808,895

The imports at the port for the month of November exceeded by \$526,154 those of the same month last year, but the proportion put upon the market was less under the influence of political causes. The accumulation in bond was over \$2,000,000 :—

FOREIGN IMPORTS AT NEW YORK IN NOVEMBER.

	1857.	1858.	1859.	1860.
Entered for consumption.....	\$2,792,185	\$7,350,322	\$9,978,720	\$8,625,416
Entered for warehousing.....	5,821,588	1,725,318	2,794,108	3,961,652
Free goods.....	1,776,384	1,425,520	1,955,087	2,487,290
Specie and bullion.....	3,027,803	90,446	167,087	446,798
Total entered at the port.....	\$13,417,960	\$10,591,606	\$14,895,002	\$15,421,156
Withdrawn from warehouse.....	3,152,316	2,124,655	1,970,134	1,597,301

The effect of the panic in 1857 manifested itself in large entries for warehouse, and extraordinary imports of specie. The effect has been similar this year, but sufficient time had not elapsed to allow the specie to arrive. The sterling bills

fell to par, and the gold from California ceased to go abroad, which was equal to an import of specie. The imports at New York, since January 1st, are less than last year, and less than in 1857:—

FOREIGN IMPORTS AT NEW YORK FOR ELEVEN MONTHS, FROM JANUARY 1ST.

	1857.	1858.	1859.	1860.
Entered for consumption.....	120,107,089	93,167,226	168,721,999	149,286,252
Entered for warehousing.....	79,033,885	24,115,146	33,340,134	39,175,038
Free goods	19,063,434	20,039,083	26,573,198	26,867,868
Specie and bullion	12,216,910	2,200,987	2,681,787	2,678,269
Total entered at the port.....	221,421,318	139,523,442	229,257,118	217,007,427
Withdrawn from warehouse.....	37,024,982	35,684,657	25,016,335	29,857,721

The imports of dry goods during the month of November show a decline from the corresponding month last year, but still in excess of the receipts of previous years for the same month. The increase of goods warehoused shows the effect of the panic which set in in November. The quantity put in bond was about as large as in the panic year, 1857:—

IMPORTS OF FOREIGN DRY GOODS AT NEW YORK FOR THE MONTH OF NOVEMBER.

ENTERED FOR CONSUMPTION.

	1857.	1858.	1859.	1860.
Manufactures of wool.....	\$132,088	\$1,052,067	\$1,830,208	\$1,465,422
Manufactures of cotton.....	67,042	687,389	939,007	448,431
Manufactures of silk.....	83,748	1,019,817	1,406,923	1,441,427
Manufactures of flax.....	56,012	465,008	664,648	405,233
Miscellaneous dry goods.....	59,281	265,760	358,220	435,265
Total.....	\$398,171	\$3,490,041	\$5,199,066	\$4,195,828

WITHDRAWN FROM WAREHOUSE.

	1857.	1858.	1859.	1860.
Manufactures of wool.....	\$154,950	\$203,011	\$123,885	\$100,809
Manufactures of cotton.....	74,239	72,653	43,090	40,218
Manufactures of silk.....	127,187	78,766	47,650	42,338
Manufactures of flax.....	26,715	117,901	74,563	29,094
Miscellaneous dry goods.....	42,318	102,151	53,693	23,322
Total.....	\$425,409	\$574,482	\$342,381	\$235,781
Add entered for consumption.....	398,171	3,490,041	5,199,066	4,195,828
Total thrown upon market...	\$823,580	\$4,064,523	\$5,541,447	\$4,431,609

ENTERED FOR WAREHOUSING.

	1857.	1858.	1859.	1860.
Manufactures of wool....	\$424,866	\$117,077	\$345,028	\$345,958
Manufactures of cotton.....	620,983	200,469	349,168	543,843
Manufactures of silk.....	488,688	95,765	150,680	242,428
Manufactures of flax.....	290,311	55,634	80,641	353,247
Miscellaneous dry goods.....	230,579	49,169	97,385	116,252
Total.....	\$2,055,927	\$518,114	\$1,025,902	\$1,601,728
Add entered for consumption ...	398,171	3,490,041	5,199,066	4,195,828
Total entered at the port...	\$2,454,098	\$4,008,155	\$6,224,968	\$5,797,556

This leaves the total imports of dry goods at New York, since January 1st, nearly \$8,000,000 less than in the corresponding period of last year. The warehousing account shows an excess entered for warehouse, indicating an accumulation in bond:—

IMPORTS OF FOREIGN DRY GOODS AT THE PORT OF NEW YORK, FOR ELEVEN MONTHS, FROM JANUARY 1ST.

ENTERED FOR CONSUMPTION.

	1857.	1858.	1859.	1860.
Manufactures of wool.....	\$19,848,504	\$15,951,589	\$31,627,415	\$29,297,399
Manufactures of cotton.....	13,911,067	8,774,510	20,579,673	13,619,867
Manufactures of silk.....	22,141,161	16,344,300	30,088,842	31,761,340
Manufactures of flax.....	5,170,527	4,240,801	9,380,326	6,249,107
Miscellaneous dry goods.....	5,550,137	3,190,458	5,294,699	5,725,000
Total.....	\$66,116,396	\$49,001,658	\$96,921,255	\$86,652,713

WITHDRAWN FROM WAREHOUSE.

	1857.	1858.	1859.	1860.
Manufactures of wool.....	\$5,031,888	\$4,507,237	\$2,849,283	\$3,193,752
Manufactures of cotton.....	2,813,062	3,417,410	1,505,916	2,340,177
Manufactures of silk.....	4,089,982	3,198,729	372,496	1,404,425
Manufactures of flax.....	1,420,743	2,058,461	993,116	801,461
Miscellaneous dry goods.....	775,453	1,314,250	437,675	544,161
Total.....	\$14,081,128	\$14,496,097	\$6,658,486	\$8,283,976
Add entered for consumption...	66,116,396	49,001,658	99,921,255	86,652,713

Total thrown on market.... \$80,197,524 \$63,497,755 103,579,741 \$94,946,689

ENTERED FOR WAREHOUSING.

	1857.	1858.	1859.	1860.
Manufactures of wool.....	\$7,854,770	\$2,120,741	\$3,338,213	\$3,599,071
Manufactures of cotton.....	4,178,679	1,927,260	1,733,076	2,882,926
Manufactures of silk.....	6,013,955	1,172,588	938,224	1,619,387
Manufactures of flax.....	2,561,074	864,418	880,937	829,699
Miscellaneous dry goods.....	1,904,663	584,819	584,013	669,683
Total.....	\$22,513,141	\$6,669,271	\$7,474,463	\$9,600,666
Add entered for consumption...	66,116,396	49,001,658	96,921,255	86,652,713

Total entered at the port... \$88,629,587 \$55,670,929 104,395,718 \$96,253,379

The export trade for the month shows an extraordinary increase over any previous year, arising from the considerable and continued shipments of bread-stuffs, at a time when the cotton movement is slack :—

EXPORTS FROM NEW YORK TO FOREIGN PORTS FOR THE MONTH OF NOVEMBER.

	1857.	1858.	1859.	1860.
Domestic produce.....	\$5,245,599	\$3,481,654	\$5,323,611	\$11,262,701
Foreign merchandise (free).....	886,528	129,671	177,288	400,218
Foreign merchandise (dutiable)....	1,194,855	264,310	639,538	84,167
Specie and bullion.....	3,239,231	471,970	4,393,123	525,091
Total exports.....	\$10,065,713	\$4,337,605	\$10,523,560	\$12,272,177
Total, exclusive of specie....	6,926,482	3,865,635	6,140,437	11,747,086

The exports, exclusive of specie, are very large as compared with the last year, and those previous to the last :—

EXPORTS FROM NEW YORK TO FOREIGN PORTS FOR TEN MONTHS, FROM JANUARY 1.

	1857.	1858.	1859.	1860.
Domestic produce.....	\$58,970,897	\$50,249,635	\$53,547,359	\$84,357,351
Foreign merchandise (free).....	3,723,297	1,416,295	2,758,045	2,161,469
Foreign merchandise (dutiable)...	6,104,554	3,600,167	4,569,642	4,931,696
Specie and bullion.....	36,825,122	24,103,223	67,453,737	41,938,670
Total exports.....	105,623,870	79,869,320	128,523,787	133,939,286
Total, exclusive of specie....	68,801,748	55,266,097	60,875,060	91,950,616

The exports, exclusive of specie, have risen to nearly \$92,000,000, a larger amount than ever before, and one that almost rivals the large freight export of New Orleans. The specie export has been at the same time larger than in any year except the last. The state of affairs now, however, point to a return of specie.

The cash revenue shows a very considerable decrease as compared with the last year, both for the month and for the eleven months:—

CASH DUTIES RECEIVED AT NEW YORK.

	1858.	1859.	1860.
First six months	\$11,089,112 57	\$19,912,181 99	\$18,889,679 00
In July	3,887,305 88	4,851,246 89	4,504,066 00
In August	3,545,119 01	4,243,010 48	4,496,243 00
In September	2,672,985 68	2,908,509 95	3,088,803 00
In October	2,054,834 43	2,318,750 82	2,682,078 00
In November	1,706,529 47	2,157,154 48	1,794,149 00
Total since Jan. 1st. ...	\$24,455,835 46	\$35,990,854 56	\$34,855,618 00

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

UNITED STATES FINANCES FOR THE YEAR 1860.

The report of the Secretary of the Treasury on the public finances for the year 1860 gives the following statement of the revenue:—

	Customs.	Lands.	Mis- cellaneous.	Treasury notes.	Loans.	Total.
Sept. 30, '59.	15,947,670 62	470,244 62	379,650 61	3,611,800	210,000	20,618,865 85
Dec. 31, '59.	10,785,849 93	445,535 36	149,392 76	4,064,500	60,000	15,505,278 05
Mar. 31, '60.	14,962,788 68	505,591 84	245,447 36	5,568,200	1,110,000	22,412,022 87
June 30, '60.	11,491,207 64	357,185 90	236,273 58	6,131,200	.....	18,215,867 12
Total						\$31,091,309 43

The expenditure during the fiscal year ending June 30, 1860, was as follows:

For the quarter ending September 30, 1859	\$20,007,174 76
For the quarter ending December 31, 1859	16,025,526 69
For the quarter ending March 31, 1860	20,377,502 70
For the quarter ending June 30, 1860	21,051,898 57
Which amount of	\$77,462,102 72

Was applied to the respective branches of the public service as follows:—

To civil, foreign intercourse, and miscellaneous services	\$27,969,870 84
To services of Interior Department, (Indians and pensions.)	3,955,686 59
To services of War Department	16,409,767 10
To services of Navy Department	11,513,150 19
To the public debt	17,613,628 00

Exhibited in detail in statement No. 1

\$77,462,102 72

Deducting the expenditure for the fiscal year 1860 from the aggregate receipts during that year, there remained in the Treasury on the 1st of July, 1860, the balance of

\$3,629,206 71

The receipts for the first quarter of the fiscal year 1861, from July 1 to September 30, 1860, were—

From customs.....	\$16,119,881 22	
From public lands	281,100 84	
From miscellaneous sources	318,857 98	
	<hr/>	16,719,790 04

The estimated receipts during the three remaining quarters of the current fiscal year 1861, are—

From customs.....	\$40,000,000 00	
From public lands	2,250,000 00	
From miscellaneous sources	750,000 00	
From loan authorized June 22, 1860.....	21,000,000 00	
	<hr/>	64,000,000 00

Making the total of ascertained and estimated means for the service of the current fiscal year, 1861..... \$84,848,996 75

The expenditures of the first quarter of the current fiscal year, (that ending September 30, 1860,) were as follows:—

For civil, foreign intercourse, and miscellaneous services.....	\$6,440,008 77	
For services of Interior Department, (Indians and pensions).....	1,579,275 24	
For service of War Department	5,352,771 42	
For service of Navy Department.....	2,578,678 88	
For payment of creditors of Texas, per act of February 28, 1855.....	1,282 81	
For redemption of Treasury notes.....	875,000 00	
For interest on public debt.....	115,560 47	
	<hr/>	16,543,472 59

The estimated expenditure from appropriations heretofore made by law, during the three remaining quarters of the current fiscal year, 1861, according to the report of the Register, is..... 46,935,232 58

The loan of June 22, 1860, the amount of which is stated among the means of the fiscal year 1861, is expressly required to be applied to the redemption of Treasury notes—the amount of those notes and interest thereon, deducting \$375,000 redeemed during the first quarter, as stated in the expenditure of that quarter, is 20,624,600 00

Making the aggregate expenditure, ascertained and estimated, for the current fiscal year 1861..... \$84,103,105 17

Which amount, deducted from the total of ascertained and estimated means for the service of the current fiscal year 1861, as before stated, leaves a balance in the Treasury on July 1, 1861, being the commencement of the fiscal year 1862, of 245,891 58

The foregoing statement assumes that the whole sum embraced in the estimated expenditure for the remaining three quarters of the current fiscal year will be actually called for within the year. The amount stated, \$46,935,232 58, does not include the entire balance of the appropriations heretofore made by law, but such sums as the respective Departments have indicated may probably be required. But in practice for many years past the sums drawn from the Treasury during any year have been much less than the amounts estimated as required within such year, according to the character of the appropriations and the exigencies of the public service. It may be, therefore, fairly anticipated that, should the operations of the Government proceed in their ordinary course, at least four millions of dollars more may be deducted from the estimated expenditure of the current fiscal year, increasing the balance in the Treasury on July 1, 1861, to that extent.

CITY WEEKLY BANK RETURNS.**NEW YORK BANK RETURNS.—(CAPITAL, JAN., 1860, \$69,832,632; 1861, \$69,890,475.)**

	Loans.	Specie.	Circulation.	Deposits.	Average clearings.	Actual deposits.
Jan. 7	124,597,663	17,863,784	8,589,068	97,493,709	22,684,854	74,808,855
14	123,682,414	18,740,866	8,090,548	99,247,743	23,863,980	75,883,763
21	123,845,931	19,238,194	7,880,865	99,644,128	22,813,547	76,830,581
28	123,088,626	20,063,789	7,760,761	98,520,793	21,640,967	76,879,826
Feb. 4	124,091,982	19,924,301	8,174,450	99,476,480	21,898,786	77,577,694
11	123,836,629	19,787,567	8,185,109	98,146,463	21,674,908	76,471,055
18	124,206,031	20,591,189	8,060,001	100,387,051	22,061,811	78,325,240
25	124,398,239	20,773,896	7,928,595	100,622,481	22,151,504	78,470,977
Mar. 3	125,012,700	23,086,812	8,165,026	103,663,462	22,787,290	80,876,172
10	127,302,778	21,861,180	8,419,633	104,813,906	23,791,958	81,021,948
17	127,562,848	23,171,838	8,380,999	108,560,981	25,562,858	82,998,123
24	127,613,507	23,286,204	8,385,266	107,505,395	25,397,976	82,107,419
31	128,888,228	23,420,759	8,444,327	106,811,554	22,839,523	83,422,031
Apr. 7	130,606,731	22,599,182	8,929,228	109,193,464	25,656,629	83,536,885
14	129,919,015	23,626,982	8,775,297	109,153,863	24,256,270	84,897,593
21	128,448,868	23,233,314	8,790,459	108,145,233	25,758,785	82,386,498
28	127,085,667	23,279,809	8,749,048	103,206,723	21,391,290	81,815,433
May 5	127,479,520	23,815,746	9,391,861	108,505,388	26,546,063	81,569,325
12	126,184,532	22,780,387	9,153,811	108,038,848	27,802,174	80,236,674
19	124,988,889	23,735,193	9,035,522	106,229,724	25,339,444	80,890,280
26	125,110,700	23,431,773	8,826,478	104,433,186	24,309,496	80,123,640
June 2	124,792,271	24,535,457	8,774,063	104,268,785	22,888,107	81,380,678
9	126,431,963	23,785,581	8,999,948	103,386,091	22,776,108	80,609,933
16	125,399,997	24,110,553	8,828,786	104,031,268	22,492,614	81,538,654
23	125,886,565	23,600,921	8,779,116	102,737,055	22,116,242	80,620,813
30	127,208,201	22,464,250	8,745,182	102,496,762	21,309,053	81,187,709
July 7	127,244,241	22,751,694	9,343,727	103,450,426	22,119,106	81,331,320
14	127,123,166	23,641,357	8,075,528	106,399,678	23,456,447	82,943,231
21	128,427,489	23,443,644	8,833,619	107,717,216	23,457,781	84,259,435
28	129,074,298	23,099,726	8,760,252	105,524,100	21,239,460	84,284,650
Aug. 4	130,118,247	22,128,189	9,176,386	107,264,777	23,471,789	83,846,988
11	129,855,179	21,579,740	9,129,835	105,505,399	22,626,292	82,879,107
18	129,950,346	21,008,701	9,088,648	105,690,481	22,984,865	82,756,116
25	130,678,997	20,119,779	9,142,006	104,423,122	22,438,949	81,989,173
Sept. 1	129,029,175	19,035,029	9,253,682	102,229,586	22,561,086	79,663,998
8	127,999,839	19,187,713	9,538,824	101,185,086	24,072,405	77,112,681
15	127,002,728	18,960,749	9,494,332	101,117,627	24,257,872	76,869,755
22	125,802,644	18,988,603	9,480,871	101,311,780	25,556,849	75,764,931
29	124,849,426	20,177,986	9,487,637	101,533,834	25,150,441	76,383,393
Oct. 6	128,337,157	20,147,828	9,570,507	103,281,058	28,104,322	75,176,736
13	122,307,138	20,273,708	9,337,283	100,753,185	25,930,584	74,822,601
20	121,903,502	22,115,228	9,261,990	104,092,356	27,337,519	76,554,837
27	123,362,626	22,798,590	9,123,108	106,999,379	28,933,760	78,065,619
Nov. 3	125,234,584	22,194,982	9,429,428	109,853,013	28,673,601	79,679,412
10	125,636,715	21,125,429	9,548,112	105,551,805	26,526,509	79,025,296
17	123,271,024	19,464,410	9,266,317	104,503,728	28,614,065	76,183,663
24	122,518,454	18,759,873	8,968,442	99,616,606	25,580,807	74,035,799
Dec. 1	129,537,459	18,541,762	8,805,944	104,354,389	23,631,621	80,722,718
8	130,214,363	18,562,743	8,956,193	102,072,145	19,887,798	82,184,167
15	131,740,132	18,343,398	8,675,793	101,932,071	17,717,677	83,214,394

BOSTON BANKS.—(CAPITAL, JAN., 1859, \$35,125,433; 1860, \$37,258,600.)

	Loans.	Specie.	Circulation.	Deposits.	Due to banks.	Due from banks.
Jan. 2 ..	59,307,566	4,674,271	6,479,483	18,449,305	7,545,222	6,848,374
16 ..	60,068,941	4,478,841	6,770,624	17,753,002	7,867,400	6,735,283
23 ..	59,917,170	4,182,114	6,486,139	17,378,070	7,784,169	6,516,532
30 ..	59,491,387	4,172,325	6,199,485	17,483,054	7,383,370	6,517,541
Feb. 6 ..	50,705,422	4,249,594	6,307,922	17,900,002	7,259,703	6,656,460

	Loans.	Specie.	Circulation.	Deposits.	Due to banks.	Due from banks.
13 ..	59,993,784	4,462,698	6,364,320	17,271,596	7,426,539	6,593,702
20 ..	60,118,886	4,577,334	6,805,537	17,597,881	7,480,060	6,549,382
27 ..	59,927,917	4,714,084	6,411,573	18,020,239	7,700,580	7,480,954
March 5 ..	59,993,784	5,034,787	6,896,656	18,645,621	7,736,290	7,768,074
12 ..	59,885,196	5,328,610	6,430,643	18,393,293	7,715,663	7,390,935
19 ..	60,268,208	5,446,840	6,405,084	18,660,205	.....	.....
26 ..	60,180,209	5,627,961	6,328,273	18,742,817	8,351,016	7,804,222
Apr. 2 ..	60,050,958	6,045,703	6,340,268	19,262,894	8,473,775	8,080,218
9 ..	60,668,559	6,320,551	7,753,491	20,469,893	9,206,161	9,788,131
16 ..	61,189,629	6,289,719	7,267,165	20,291,620	9,160,868	8,314,313
23 ..	61,035,965	6,315,952	7,152,766	20,266,917	9,055,077	8,138,121
30 ..	61,259,552	6,317,999	6,992,903	20,195,951	9,273,558	7,948,086
May 7 ..	61,614,199	6,311,714	7,322,813	20,810,086	9,116,514	8,324,891
14 ..	61,744,290	6,263,535	7,076,071	20,758,862	9,210,132	8,209,699
21 ..	61,724,621	6,268,919	7,081,306	20,726,996	9,197,894	8,241,899
28 ..	61,258,986	6,201,113	6,660,595	20,320,518	9,057,822	8,272,557
June 4 ..	61,585,669	6,192,455	6,800,711	20,656,295	9,172,878	8,366,511
11 ..	62,846,519	6,300,700	7,090,282	20,228,677	9,629,483	7,857,439
18 ..	63,085,953	6,322,698	7,165,453	20,677,536	9,988,840	7,991,098
25 ..	63,557,155	6,262,930	7,188,326	20,750,673	10,307,194	8,188,802
July 2 ..	64,172,028	6,059,370	6,925,022	20,828,714	10,300,178	7,527,888
9 ..	65,039,459	6,087,718	7,932,653	21,133,175	11,304,393	9,105,376
16 ..	65,153,413	5,885,920	7,560,636	20,312,421	11,098,306	7,995,222
23 ..	64,852,961	5,385,523	7,523,745	19,751,313	11,093,127	8,158,425
30 ..	64,460,289	5,212,470	6,848,834	19,296,454	10,358,708	6,961,414
Aug. 6 ..	64,777,963	5,164,006	7,127,254	19,610,274	9,923,931	7,378,456
13 ..	64,840,527	5,128,628	7,075,440	19,157,661	9,851,112	6,816,650
20 ..	64,650,278	5,068,925	7,107,097	18,700,624	9,772,783	6,781,286
27 ..	64,216,345	4,966,105	6,790,847	18,965,057	9,656,546	6,956,287
Sept. 3 ..	64,054,318	5,051,016	6,759,683	19,235,834	9,681,885	7,364,997
10 ..	64,568,627	5,330,357	7,241,099	19,297,692	9,483,436	7,238,107
17 ..	64,739,371	5,381,366	7,078,175	19,032,822	9,479,905	6,755,991
24 ..	64,639,800	5,376,494	7,151,186	19,458,033	9,456,341	7,218,410
Oct. 1 ..	64,662,239	5,377,112	7,188,844	19,900,786	9,439,696	7,525,447
8 ..	64,671,820	5,315,009	7,951,028	20,811,889	9,504,474	8,639,105
15 ..	64,488,073	5,277,370	7,761,043	20,608,408	9,419,914	8,305,406
22 ..	64,213,174	5,196,693	7,966,762	20,806,306	9,708,676	9,061,273
29 ..	63,822,365	5,089,490	7,542,859	20,259,916	9,070,637	8,215,458
Nov. 5 ..	64,040,382	4,856,055	7,607,932	20,096,590	9,015,647	8,186,634
12 ..	64,089,033	4,818,274	7,791,905	19,647,449	9,083,185	8,023,214
19 ..	64,150,613	4,518,341	7,705,674	19,384,362	9,121,890	8,341,583
26 ..	62,719,557	3,890,074	7,345,893	17,964,675	8,334,922	7,915,718
Dec. 3 ..	62,069,772	3,553,157	7,459,377	17,327,850	7,886,884	7,993,210
10 ..	61,870,655	3,532,677	7,244,907	17,176,778	7,684,065	7,723,272

PHILADELPHIA BANKS.—(CAPITAL, JAN., 1860, \$11,783,190.)

Date.	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan. 2....	25,386,387	4,450,261	2,856,601	14,982,919	2,619,192
9....	25,248,051	4,453,252	2,675,823	14,161,437	2,596,212
16....	25,275,219	4,561,998	2,672,730	14,984,517	2,563,449
23....	25,445,737	4,514,579	2,644,191	15,064,970	2,601,271
30....	25,526,198	4,535,321	2,601,750	15,401,915	2,619,573
Feb. 6....	25,493,975	4,669,929	2,656,310	15,409,241	2,574,015
13....	25,493,975	4,669,929	2,656,310	15,409,241	2,574,015
20....	25,458,354	4,581,356	2,663,695	14,864,302	2,782,306
27....	25,553,918	4,706,108	2,653,192	14,590,092	3,115,010
Mar. 5....	25,742,447	4,816,052	2,697,108	15,192,971	3,133,312
12....	25,742,447	4,816,052	2,697,108	15,192,971	3,133,312
19....	25,832,077	4,873,419	2,783,345	15,206,432	3,209,553
26....	26,043,772	4,992,542	2,784,773	15,693,622	3,198,530
April 2....	26,405,229	5,080,274	2,858,812	15,553,269	3,652,757
9....	27,214,254	5,209,576	3,528,742	15,528,762	4,085,695
16....	27,444,580	5,415,711	3,252,186	16,012,140	4,164,673

		Loans.	Specie.	Circulation.	Deposits.	Due bank.
	28....	27,545,351	5,464,280	3,154,285	16,613,616	3,985,110
	30....	27,571,002	5,453,470	3,037,846	16,529,891	3,902,514
May	7....	27,590,212	5,477,019	2,968,444	16,763,609	3,731,987
	14....	27,463,881	5,537,860	2,944,245	16,489,872	4,209,845
	21....	27,401,926	5,367,416	2,870,617	16,422,835	4,085,882
	28....	27,288,982	4,866,579	2,812,719	15,884,903	3,974,369
June	4....	27,171,002	4,582,610	2,824,471	15,620,293	3,744,431
	11....	27,046,016	4,183,667	2,810,552	15,698,909	3,128,287
	18....	26,882,709	4,222,644	2,725,269	15,642,689	3,109,639
	25....	26,780,538	4,329,638	2,654,503	15,643,433	3,060,615
July	2....	26,835,868	4,305,866	2,960,381	15,824,391	3,159,819
	9....	26,835,868	4,305,866	2,960,381	15,824,391	3,159,819
	16....	26,878,435	4,403,157	2,859,852	15,796,205	3,313,195
	23....	26,842,743	4,553,641	2,821,082	15,966,734	3,099,567
	30....	26,851,776	4,249,304	2,755,718	16,085,967	3,211,855
Aug.	6....	26,936,227	4,800,443	2,837,207	16,669,525	3,097,589
	13....	26,830,307	4,768,405	2,849,340	16,671,260	3,261,584
	20....	26,835,337	4,771,772	2,854,653	15,688,318	3,275,638
	27....	27,095,028	4,757,917	2,835,524	15,923,769	3,185,826
Sept.	3....	27,095,028	4,257,917	2,835,524	15,923,769	3,235,107
	10....	27,224,180	4,753,709	2,891,376	16,103,815	3,243,168
	17....	27,492,859	4,741,624	2,909,887	16,313,516	3,305,117
	24....	27,760,486	4,632,878	2,887,640	16,453,442	3,151,218
Oct.	1....	27,933,753	4,676,099	2,832,280	16,852,538	3,300,354
	8....	28,113,980	4,661,947	3,005,854	16,879,463	3,183,699
	15....	28,119,333	4,507,980	3,016,060	16,786,933	3,124,499
	22....	28,233,640	4,567,435	2,888,304	16,861,020	3,126,237
	29....	28,305,277	4,417,421	2,849,768	16,815,563	3,143,517
Nov.	5....	27,900,837	4,167,967	2,887,613	16,739,326	2,659,627
	12....	27,364,659	4,011,943	2,892,212	16,254,245	2,427,153
	19....	26,775,878	4,115,932	2,791,752	15,833,121	2,424,987
	26....	26,576,322	3,844,542	2,640,912	14,699,679	2,720,574

NEW ORLEANS BANKS.—(CAPITAL, JAN., 1860, \$18,917,600.)

		Shortloans.	Specie.	Circulation.	Deposits.	Exchange.	Distant balances.
Jan.	7..	25,022,456	12,234,448	12,038,494	18,563,804	7,323,530	1,557,174
	14..	24,928,909	12,336,735	12,417,847	18,678,238	7,410,360	1,387,704
	21..	24,699,024	12,821,411	12,809,512	18,664,355	7,423,629	1,377,796
	28..	24,916,431	12,818,159	12,882,184	19,677,121	8,144,681	1,603,763
Feb.	4..	25,145,274	12,750,642	13,215,494	19,565,305	8,003,380	1,618,036
	11..	25,197,351	12,741,881	13,343,924	19,244,847	7,349,365	1,396,150
	18..	25,005,952	12,894,521	13,458,989	19,903,519	7,886,609	1,470,787
	25..	24,397,286	12,945,204	13,600,419	19,218,590	8,088,929	1,635,526
Mar.	3..	24,946,210	12,952,002	13,860,899	20,116,272	8,027,049	1,092,475
	10..	24,088,800	13,039,092	13,726,554	19,711,423	8,582,012	1,601,149
	17..	24,054,845	12,729,356	13,797,154	19,304,618	8,498,790	1,718,310
	24..	23,832,766	12,610,790	13,835,755	19,102,068	8,342,599	1,738,246
	31..	23,674,714	12,437,195	13,975,624	18,681,020	8,149,061	1,610,499
Apr.	7..	23,107,740	12,368,071	14,100,890	18,070,209	8,560,117	1,942,066
	14..	22,422,203	12,290,539	13,688,089	17,849,018	8,179,441	1,603,463
	21..	22,380,033	12,100,687	12,999,204	18,380,033	7,649,069	1,649,060
	28..	21,437,974	11,910,361	12,783,749	17,699,538	7,686,634	1,877,017
May	5..	21,437,974	11,910,361	12,783,749	17,699,538	7,686,634	1,877,017
	12..	20,545,529	11,672,364	12,258,444	17,442,974	7,213,833	1,763,871
	19..	19,385,119	11,706,007	12,163,609	17,260,226	6,909,386	1,680,480
	26..	18,588,492	11,593,719	11,900,864	17,938,774	6,599,676	1,596,210
June	2..	18,282,807	11,191,024	11,791,799	16,985,565	6,173,788	1,459,051
	9..	17,423,118	11,072,236	11,572,259	16,989,587	5,958,996	1,442,041
	16..	16,864,692	10,693,389	11,389,839	16,105,556	5,538,830	1,665,076
	23..	16,821,969	10,223,276	11,138,434	15,319,947	5,067,682	1,739,481
July	7..	16,627,125	9,833,812	10,921,057	14,671,491	4,545,395	1,601,540
	14..	16,795,836	9,693,954	10,695,584	14,557,417	4,123,242	1,401,804

	Short loans.	Specie.	Circulation.	Deposits.	Exchange.	Distant balances.
21 ..	16,945,426	9,544,793	10,310,824	14,326,547	3,706,020	1,512,608
28 ..	17,802,024	9,607,448	10,071,388	14,358,384	3,219,947	1,168,961
Aug. 4 ..	19,006,951	9,780,180	9,786,684	14,264,107	2,900,039	1,318,398
11 ..	19,388,879	9,846,131	9,526,984	14,368,664	2,565,150	1,182,381
18 ..	20,313,484	9,801,183	9,357,964	14,107,235	2,119,789	1,299,462
25 ..	21,332,818	9,900,424	9,263,874	13,614,301	1,756,084	1,346,814
Sept. 1 ..	22,049,988	9,907,517	9,196,144	13,808,771	1,431,800	1,081,228
8 ..	22,241,708	9,939,917	9,056,744	13,555,731	1,308,873	929,613
15 ..	23,144,157	9,851,213	8,929,404	13,546,294	1,344,890	1,078,178
22 ..	23,871,978	9,816,247	8,872,808	13,403,925	1,463,612	1,077,600
29 ..	24,285,860	9,691,812	8,752,344	13,978,081	2,016,320	880,638
Oct. 6 ..	24,670,487	9,765,171	8,633,759	14,084,071	2,136,911	810,469
13 ..	24,630,084	9,933,431	8,344,109	14,333,090	2,291,278	810,460
20 ..	24,670,161	9,988,225	8,296,660	14,759,556	3,037,312	797,404
27 ..	24,456,180	10,008,169	8,163,109	15,581,396	3,940,930	691,524
Nov. 3 ..	24,440,677	10,043,180	8,257,044	15,439,008	4,225,153	891,986
10 ..	23,443,541	10,219,761	8,063,239	15,581,600	4,913,074	721,008
17 ..	22,593,437	10,850,025	7,892,024	15,377,754	5,032,845	849,955
24 ..	22,141,224	11,050,367	7,463,239	14,948,286	5,160,203	1,173,037
Dec. 1 ..	21,532,975	10,626,491	7,170,297	14,689,064	5,380,293	871,775

PITTSBURG BANKS.—(CAPITAL, \$4,160,200.)

	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan. 16	7,202,367	980,530	2,080,548	1,527,548	804,562
23	7,060,471	1,022,273	2,012,478	1,545,103	255,076
30	6,989,320	1,003,037	1,896,363	1,555,686	265,804
Feb. 6	6,984,209	997,589	1,907,323	1,609,692	230,426
13	6,939,052	951,638	1,883,093	1,602,311	191,222
20	6,957,621	988,306	1,868,598	1,643,703	175,051
27	7,022,280	991,377	1,821,283	1,760,957	224,484
Mar. 5	7,101,459	1,018,255	1,871,878	1,768,879	273,343
12	7,035,624	999,093	1,901,543	1,651,216	197,007
19	7,066,774	1,004,760	1,945,323	1,836,887	198,556
26	7,088,891	981,560	1,930,732	1,572,130	192,411
Apr. 2	7,166,377	1,005,415	2,085,583	1,601,167	191,101
9	7,206,737	990,962	2,072,373	1,693,230	171,100
16	7,159,568	1,018,445	2,071,878	1,651,362	187,255
23	7,278,279	1,156,278	2,024,138	1,897,493	240,143
30	7,234,761	1,141,373	1,995,053	1,913,537	175,671
May 5	7,234,761	1,141,373	1,995,053	1,913,537	175,671
14	7,263,197	1,088,851	2,011,258	1,890,810	215,765
19	7,196,493	1,133,719	2,022,988	1,906,773	213,944
27	7,190,192	1,122,057	1,962,683	1,918,321	206,316
June 4	7,282,963	1,089,751	1,907,248	1,919,903	277,978
11	7,214,889	1,126,808	1,919,688	1,892,300	240,728
18	7,247,541	1,102,446	2,029,558	1,743,915	271,062
25	7,291,888	1,150,248	2,048,358	1,779,752	315,858
July 14	7,310,663	1,068,974	2,071,443	1,818,515	239,832
21	7,294,391	1,083,220	2,073,593	1,846,879	205,011
28	7,215,944	1,098,084	2,069,303	1,861,817	167,671
Aug. 6	7,203,057	1,130,002	2,018,628	1,860,348	234,346
13	7,138,260	1,123,027	1,990,498	1,853,759	175,924
20	7,093,091	1,152,198	2,007,653	1,859,418	239,790
27	7,047,761	1,167,384	2,084,758	1,843,750	232,181
Sept. 3	7,145,776	1,159,423	2,124,003	1,905,667	240,419
10	7,139,564	1,225,151	2,196,578	1,904,823	222,155
17	7,121,227	1,188,707	2,299,438	1,819,248	210,274
24	7,107,947	1,246,526	2,341,363	1,831,365	238,058
Oct. 8	7,109,573	1,318,187	2,354,303	1,962,570	211,260
15	7,043,506	1,316,266	2,334,208	1,959,786	186,111
22	7,122,862	1,317,061	2,443,188	1,924,511	215,888
29	7,109,206	1,379,594	2,424,788	1,949,736	244,903
Nov. 5	7,262,599	1,400,485	2,416,713	2,038,382	250,121

	Loans.	Specie.	Circulation.	Deposits.	Due banks.
12.....	7,192,918	1,419,264	2,384,496	2,077,671	178,025
19.....	7,280,758	1,408,588	2,509,791	1,948,838	192,985
26.....	7,287,895	1,290,069	2,513,097	1,856,161	321,010
Dec. 8.....	7,306,180	1,319,860	2,483,686	1,961,797	272,203
10.....	7,286,705	1,314,236	2,494,871	1,905,937	248,243

ST. LOUIS BANKS.

	Exchange.	Circulation.	Specie.
Jan. 7.....	4,378,543	538,555	662,755
14.....	4,467,513	520,305	642,497
21.....	4,352,699	502,175	580,754
28.....	4,290,563	495,380	563,335
Feb. 4.....	4,149,236	457,095	590,502
11.....	4,048,593	424,605	625,043
18.....	3,906,896	391,605	639,450
25.....	3,951,438	399,085	630,877
March 3.....	3,891,263	395,906	689,801
10.....	3,998,327	377,935	651,302
17.....	3,968,924	377,355	641,252
24.....	3,880,915	356,245	664,179
31.....	3,790,291	340,095	685,984
April 7.....	3,862,454	344,630	657,321
14.....	3,863,345	325,950	676,858
21.....	3,852,614	314,360	601,014
28.....	3,694,377	306,750	678,234
May 5.....	3,609,648	301,300	746,176
12.....	3,688,644	294,115	808,918
19.....	3,695,707	285,140	826,793
26.....	3,767,986	273,540	671,669
June 2.....	3,879,617	255,210	627,942
9.....	3,823,735	253,780	656,358
16.....	3,888,763	244,850	682,917
23.....	3,967,032	235,935	705,764
30.....	3,825,423	206,749	804,933
July 7.....	3,736,695	199,385	791,729
14.....	3,392,096	152,025	684,358
21.....	3,679,192	191,375	752,397
28.....	3,625,333	177,620	658,852
Aug. 4.....	3,526,093	173,310	633,795
11.....	3,540,196	176,115	637,310
18.....	3,560,267	188,375	714,046
25.....	3,599,470	220,605	728,545
Sept. 1.....	3,688,644	222,600	700,897
8.....	3,630,708	233,190	714,496
15.....	3,778,135	240,560	709,193
22.....	3,814,863	253,605	679,617
29.....	3,995,986	240,300	722,368
Oct. 6.....	4,027,365	255,765	677,522
13.....	4,125,663	254,950	646,195
20.....	4,262,411	239,210	552,336
27.....	4,391,887	277,235	570,566
Nov. 3.....	4,477,847	315,300	597,780
10.....	4,484,016	298,365	596,928
17.....	4,474,864	274,125	543,395
26.....	4,499,182	235,970	511,565
Dec. 1.....	4,556,218	229,020	494,785
8.....	4,830,301	246,310	515,482

PROVIDENCE BANKS.—(CAPITAL, \$14,903,000.)

	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan. 2.....	19,144,854	315,917	2,011,336	2,635,436	938,508
Feb. 6.....	19,144,346	326,297	1,958,540	2,566,168	921,779
Mar. 3.....	19,009,255	342,965	1,917,593	2,598,169	970,971
Apr. 1.....	18,686,210	343,992	1,952,022	2,640,170	1,040,260

	Loans.	Specie.	Circulation.	Deposits.	Due banks.
May 7.	18,893,653	448,413	2,045,590	2,773,248	1,356,071
June 4.	18,891,907	422,726	1,988,254	2,844,012	1,210,104
July 2.	19,248,061	430,128	2,158,904	2,790,587	1,116,951
Aug. 6.	19,580,296	397,286	2,218,347	2,748,678	1,169,800
Sept. 3.	19,566,718	357,138	2,128,957	2,526,943	1,082,109
Oct. 1.	19,834,317	337,851	2,183,347	2,590,103	894,204
Nov. 5.	19,901,828	368,551	2,092,267	2,723,904	1,170,866
Dec. 3.	19,748,430	343,153	1,992,963	2,648,232	1,164,102

NEW YORK BANK LOANS.

RESOLUTIONS OF THE NEW YORK BANK OFFICERS.

At a meeting of the officers of the banks of the city of New York, at the Merchants' Bank, on Wednesday, the 21st of November, 1860, the following proceedings were unanimously adopted, viz. :—

In order to enable the banks of the city of New York to expand their loans and discounts, and also for the purpose of facilitating the settlement of the exchanges between the banks, it is proposed that any bank in the Clearing-house Association, may, at its option, deposit with a committee of five persons—to be appointed for that purpose—an amount of its bills receivable; United States stock, Treasury notes, or stocks of the State of New York, to be approved by said Committee, who shall be authorized to issue thereupon to said depositing bank certificates of deposit bearing interest at seven per cent per annum, in denominations of five and ten thousand dollars each, as may be desired, to an amount equal to seventy-five per cent of such deposit. These certificates may be used in settlements of balances at the Clearing-house, for a period of thirty days from the date thereof, and they shall be received by creditor banks, during that period, daily, in the same proportion as they bear to the aggregate amount of the debtor balances paid at the Clearing house. The interest which may accrue upon these certificates shall, at the expiration of the thirty days, be apportioned among the banks which shall have held them during that time.

The securities deposited with said Committee, as above named, shall be held by them in trust as a special deposit, pledged for the redemption of the certificates issued thereupon.

The Committee shall be authorized to exchange any portion of said securities for an equal amount of others, to be approved by them at the request of the depositing bank, and shall have power to demand additional security either by an exchange or an increased amount, at their discretion.

The amount of certificates which this Committee may issue as above shall not exceed five million dollars.

This agreement shall be binding upon the Clearing-house Association when assented to by three-fourths of its members.

Resolved, That in order to accomplish the purpose set forth in this agreement, the specie belonging to the associated banks shall be considered and treated as a common fund for mutual aid and protection, and the Committee shall have power to equalize the same by assessment or otherwise.

For this purpose statements shall be made to the Committee of the condition of each bank on the morning of every day before commencement of business, which shall be sent with the exchanges to the manager of the Clearing-house, specifying the following items, viz. :—

1. Loans and discounts.
2. Deposits
3. Loan certificates.
4. Specie.

Resolved, That after the 1st of February next, every bank in the Clearing-house Association shall have on hand at all times, in specie, an amount equal to one fourth of its net liabilities, and any bank whose specie shall fall below that

proportion, shall not make loans or discounts until their position is re-established ; and we, as members of the Clearing-house Association, agree that we will not continue to exchange with any bank which shall show by its two successive weekly statements that it has violated this agreement.

The Chairman appointed the following named gentlemen as the Committee :—

MOSES TAYLOR, of the City Bank.
JAMES PUNNETT, of the Bank of America.
R. W. HOWES, of the Park Bank.
A. S. FRASER, of the Seventh Ward Bank,
O. P. LEVERICH, of the Bank of New York.

Adjourned.

W. F. HOOPER, Secretary.

JOHN A. STEVENS, Chairman.

PROPERTY OF DUBUQUE IN THE LAST SEVEN YEARS.

There are few things more suggestive than the following, which we find in the *Dubuque Herald* :—

A look into the City Assessor's books for the last seven years, gives one an idea of the changes that have rolled over Dubuque in that time. The figures show assessments as follows :—

1854	\$2,702,038	1858	6,080,917
1855	4,323,560	1859	4,854,002
1856	8,221,228	1860	2,625,863
1857	10,200,000		

From the above it will be seen that there was a regular ascent in value, which culminated in 1857, and a regular decline which brings us about where we were when we started in 1854.

VIRGINIA PUBLIC DEBT, SEPTEMBER 30, 1860.

Amount of certificates of State 6 per cent registered debt.....	\$18,436,641 63
Amount of certificates of State 5 per cent registered debt.....	322,000 00
Aggregate amount of the registered debt of the State	\$18,758,641 63
Amount of certificates of debt issued in the form of coupon bonds, payable in New York	12,624,500 00
Amount of certificates of debt issued in the form of 5 per cent sterling coupon bonds, payable in London	1,865,000 00
Aggregate public debt	33,248,141 63

ABRASION OF COIN.

The officers of the Assay-office, in the United States mint, have just concluded some interesting experiments on the question whether the amount of wear on coin is increased by extending its surface. The generally received opinion is that it is. But the fact is the reverse. The annual wear on the Spanish quarters is considerably less than on our quarters of smaller diameter ; and the same result is found in comparing the thick and thin gold dollars. The thin dollar, the last issue, wears the least. It is accounted for from the fact that the thin coin receives a greater compression ; and also to the less momentum which an article of extended surface moves. If the diameter of our larger gold coins be made greater, the thickness will not be sufficient to allow of the substitution, by rogues, of platinum instead of the gold which they remove from the center of the coin, a fraud much practiced at the present time.

THE ASSESSED VALUE OF THE REAL ESTATE OF PHILADELPHIA.

The following statement exhibits the assessment for 1860, as compared with the triennial assessment made in 1859:—

Wards.	Value		Wards.	Value	
	1860.	1859.		1860.	1859.
1.....	\$5,342,788	\$5,238,500	14.....	5,077,165	5,077,175
2.....	3,613,931	3,620,835	15.....	7,623,800	6,819,630
3.....	2,692,495	2,541,821	16.....	3,187,048	3,072,776
4.....	3,027,000	3,022,230	17.....	2,060,800	1,995,890
5.....	13,593,319	13,634,970	18.....	2,676,500	2,622,890
6.....	21,280,480	21,233,471	19.....	5,549,300	5,622,465
7.....	7,505,532	7,338,667	20.....	7,535,719	7,344,525
8.....	13,261,847	12,946,000	21.....	3,093,329	2,918,451
9.....	12,055,500	11,246,000	22.....	4,711,172	4,431,460
10.....	8,177,000	8,185,500	23.....	4,907,233	4,900,835
11.....	4,619,608	4,614,500	24.....	5,525,951	5,123,160
12.....	4,051,926	3,077,975			
13.....	5,601,850	5,378,800			
			Total.....	\$154,773,748	\$153,000,236

GEORGIA FINANCES.

In this Magazine, (vol. xliii., page 222,) will be found the valuations of Georgia for the last year. The following is contained in the report of PETERSON THWEATT, the Controller of the State. His report is for the year ending October 20, 1860:—

The cash balance in the treasury is.....	\$274,820 54
Deduct undrawn appropriations.....	241,727 90

Leaving a net surplus of..... \$33,092 64

The Controller states that the good assets of the State amount to \$807,025. In those assets he does not include the Western and Atlantic Railroad, which belongs to the State, and which paid into the treasury, as net earnings, in 1859, \$420,000, and in 1860, \$450,000.

The receipts into the treasury for the past year from taxes, net earnings of State road, bank dividends, and all sources, amounted to \$1,453,930 78. The expenditures for all purposes were \$1,179,110 24, leaving a balance of \$274,820 54.

The following table shows the total value of the various items of taxation in Georgia in 1859 and 1860:—

Property subject to taxation.	Value in 1859.	Value in 1860.
Land.....	\$149,547,880	\$161,764,955
Slaves.....	271,620,504	302,694,855
City and town property.....	32,129,814	35,139,415
Money and solvent debts.....	96,124,701	107,336,258
Merchandise.....	13,531,687	15,577,193
Shipping and tonnage.....	631,731	943,940
Stocks, manufactures, etc.....	4,428,132	4,034,252
Household and kitchen furniture.....	2,260,937	2,374,284
Other property not mentioned.....	39,315,089	42,427,295
Total.....	\$609,589,975	\$672,292,447
Number of polls.....	98,945	99,748
“ of professions.....	2,838	2,699
“ of dentists.....	92	96
“ of daguerrean artists.....	57	66
“ of free negroes.....	1,213	1,225
“ of acres of land.....	33,459,223	33,345,289
“ of slaves.....	443,364	450,033

In 1859 the increased value of taxable property over 1858 was \$70,534,762 ; and this year the increase is \$62,702,872, making an increase over the past two years of \$133,237,234.

GEORGIA PUBLIC DEBT—IN BONDS.

Due in 1861, 7 per cent Central Bank bonds.....	\$10,000
" 1862, " " "	32,500
" 1863, " " "	45,500
" 1864, " " "	60,000
" 1865, " " "	100,000
" 1866, 6 per cent, now redeemable*.....	28,000
" 1867, " " "	16,500
" 1868, " " "	190,000
" 1869, " " "	262,500
" 1869, 5 per cent, "	72,000
" 1870, 6 per cent, "	102,500
" 1871, " " "	156,250
" 1872, " " "	622,000
" 1872, 7 per cent, redeemable in 1862	100,000
" 1873, 6 per cent, "	171,000
" 1874, " " "	75,000
" 1874, 7 per cent, "	177,000
" 1878, 6 per cent, "	100,000
" 1879, " " "	200,000
" 1880, " " "	150,000
Total public debt in bonds.....	\$2,670,750

There are twenty-five banks in operation in Georgia, with an authorized capital of \$17,000,000, but they only employ \$9,028,078. The tax in this State on bank stock is 39 1-16 cents on the one hundred dollars, or six times more than other capital.

There are eighteen agencies of South Carolina banks in Georgia, and they pay taxes only to the amount of \$1,830 44.

The Controller's report contains a list of the names of agents and names of insurance companies in Europe and America which pay taxes in the State. The total tax paid by them is \$1,578 68.

The report also gives a synopsis of the several bank charters, when the banks were chartered, the time the charters expire, the capital stock, the amount of business authorized to be done in proportion to the capital stock paid in, the the personal liability clause, etc.; also a list of the banks which withdrew from business with credit, banks chartered that have never gone into operation, banks that went into operation, but failed, or that suspended specie payments and business altogether.

Altogether the report of the Controller-General of Georgia is a valuable and interesting document to financial circles.

BANKS OF WISCONSIN--CIRCULATION AND SECURITIES.

From the report of the State Bank Controller, we give the following facts in relation to the condition of the Wisconsin banks on the 1st day of October, 1860. The whole amount of circulating notes outstanding was \$4,451,572, which was secured by public stocks at par value, and specie, as follows :—

* The State of Georgia. In 1848, reserved to itself the right to redeem certain bonds after ten years. These, amounting \$218,000, are within that reservation.

Wisconsin 6 per cents.....	\$100,000 00
Minnesota 8 per cents.....	78,000 00
California 7 per cents.....	334,000 00
Georgia 6 per cents.....	\$38,500
Georgia 7 per cents.....	20,000
	<hr/>
	58,500 00
Illinois 6 per cents.....	508,280 00
Iowa 7 per cents.....	18,000 00
Indiana 5 per cents.....	\$78,700
Indiana 2½ per cents.....	8,000
	<hr/>
	86,700 00
Kentucky 6 per cents.....	23,000 00
Louisiana 6 per cents.....	\$10,000
Louisiana 6 per cents.....	155,500
	<hr/>
	165,500 00
Missouri 6 per cents.....	1,408,000 00
Michigan 6 per cents.....	205,500 00
North Carolina 6 per cents.....	596,500 00
Ohio 6 per cents.....	175,000 00
Tennessee 6 per cents.....	834,000 00
Virginia 5 per cents.....	\$9,600
Virginia 6 per cents.....	179,000
	<hr/>
	198,600 00
Racine and Mississippi Railroad bonds, 8 per cent.	27,000 00
Milwaukee and Watertown Railroad bonds, 8 per cent	50,000 00
	<hr/>
Total bonds.....	\$4,851,580 00
Specie.....	148,429 50
	<hr/>
Total.....	\$5,000,009 50

The increase of securities during the year was \$87,208 50; the increase of outstanding circulation during the same period was \$43,451. The present Bank Controller, since his entrance upon the duties of the office, has spared no pains to get rid of Missouri and Virginia stocks, and to supply their place with other securities. The following table shows the increase and decrease in the several kinds of securities during the twelve months prior to October 1st.

The increase has been in the following securities:—

Minnesota 8 per cents.....	\$78,000 00
California 7 per cents.....	260,000 00
Georgia 6 per cents.....	8,000 00
Iowa 7 per cents.....	8,000 00
Indiana 5 per cents.....	\$28,700
Indiana 2½ per cents.....	8,000
	<hr/>
	81,700 00
Kentucky 6 per cents.....	12,000 00
Louisiana 6 per cents.....	8,000 00
Michigan 6 per cents.....	58,000 00
North Carolina 6 per cents.....	290,000 00
Tennessee 6 per cents.....	127,000 00
	<hr/>
Total.....	\$885,700 00
Less decrease in—	
Missouri 6 per cents.....	\$547,000 00
Virginia 5 per cents.....	96,000 00
Virginia 6 per cents.....	3,000 00
Ohio 6 per cents.....	55,000 00
Illinois 6 per cents.....	39,540 00
Pennsylvania 5 per cents.....	9,000 00
Specie.....	48,951 50
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	798,491 50
Total.....	\$87,208 50

STATISTICS OF TRADE AND COMMERCE

THE SUGAR CROPS OF CUBA.

There are at present, or were in full operation during the last season, 1,365 sugar estates in this island, which produced, this year, 1,127,348,750 lbs., equal to 563,674 tons of sugar. Out of these 1,365 plantations, there are 949 using steam power; 7 with water power, and 409 with ox power, the old or primitive style.

The total extent of land planted with cane on these plantations is 691,917 acres, while the area on the estates used for other purposes, viz.: cattle fields, fruit, vegetable gardens, etc., comprise 1,289,650 acres, or nearly double the quantity used for cane, which is about one-fourth of the area of the island, which amounts to 30,741,000 acres. The average yield per acre was about 1,400 weight, realizing, at four cents per pound, about \$62 75.

If the weight of each box of sugar is put down at the average of 425 lbs., net, it will be seen that the whole production of the year is equal to 2,662,508 boxes, which, at the prices that have ranged since January, can be well estimated at \$17 per box, making the total value of the crop \$45,093,860. If to this we add the value of the molasses and rum produced on our sugar estates, it will swell the amount to a very large extent.

It is worthy of notice, that the proportion of production to the land under cultivation is much smaller in the Western than in the Eastern department—the latter yielding at the rate of nearly 5 boxes to the acre, whilst the former is little over 3½ boxes, and yet the number of estates in the Eastern department are less than one-third of those in the Western. This is a matter worthy the attention of the planters in this section of the island, as we believe it is a fact which has not hitherto been proven, although often alluded to. For the present we must limit our figures to the following:—

Departments.	No. estates.	Acres cane.	Sugar, lbs.
Western.....	1,065	641,680	1,022,880,250
Eastern.....	300	50,233	104,468,500
Total.....	1,365	691,913	1,127,348,750

Thus it will be seen that the production of sugar this year reached 563,674 tons, which, if our memory is not amiss, is more than double the quantity ever produced in Louisiana in any year, (1853, we believe, was the largest crop, i. e., 269,360 tons;) the number of plantations in Louisiana this year being 1,308, or 57 less than in Cuba. The production of our plantations in 1859 and 1860, calculating the weight of boxes at 425 lbs. net each, and the hhds. at 1,200, 1,350, 1,450, and 1,500, according to the different sections of the country, is estimated to have been—

	1859.		1860.	
	Boxes.	Hhds.	Boxes.	Hhds.
Western Department.....	1,131,923	287,167	1,310,330	337,041
Eastern ".....	7,735	68,460	5,612	81,019
Total.....	1,339,658	355,617	1,316,042	418,060

If we calculate the excess in weight this year at the rate of 425 lbs. per box,

the true result will appear to be equal to 153,600 bxs. more this year than last. As compared with the crop in Louisiana in 1860, the figures will stand thus :—

	Tons.	Average per estate about....	Tons.
Cuba.....	503,280	" " "	375
Louisiana....	114,000	" " "	87

Showing in favor of the former an excess of 389,000 tons, which is due entirely to difference of latitude and the absence of frosts, there being more care and skill expended in Louisiana in bringing the crop to maturity than in Cuba, where the climate favors the planter.

It will be seen by the annexed table that the amount of steam and animal power employed in Louisiana is relatively greater than that employed in Cuba, where a crop four times larger is grown :—

	Estates.	St'm power.	An'ml power.	Water.	Pr. ct. st'm.
Cuba	1,365	949	409	7	70
Louisiana	1,308	992	316	.	75

There is not on the surface of the globe another country which yields such rich returns for the labors of the agriculturist as Cuba, or whose land owners are so wealthy as a class. The incomes derived from the sugar estates range from \$5,000 to \$200,000, and, as several of these are in the hands of one proprietor, the revenues of individuals are in many instances almost regal in their amount. No small proportion of these incomes are spent here, it being the custom of the wealthy Cuban families to send their children to the United States to be educated, and to pass themselves a portion of the year at our Northern watering-places. The names of the ALFONSOS, the ALDAMAS, the SAN FERNANDOS, the MONTALNOS, the HERRERAS, and the DUQUESNES are almost as familiar at those places as those of our own commercial magnates. If we were to estimate the sum annually expended by Cubans in this country at \$5,000,000 we should not be far from the truth. Besides the sums which they leave here, they also spend a large amount annually on the continent of Europe. There is scarcely a country, in fact, which offers any attraction that does not benefit, more or less, by the wealth of the Cuban aristocracy.

TRADE AND TONNAGE OF THE LAKES.

We extract from the *New York World* the following remarks in relation to the lake trade :—

The immense amount of surplus produce which the Northwest is now forwarding to the Eastern markets, and the consequent increased transportation of return merchandise, has given new life, activity, and importance to the tonnage of the great lakes. Not less than \$600,000,000 of property will be transported, both ways, over this national highway in the twelve months next following the first of last August. This is a trade greater than the entire foreign commerce of the United States, and serves to give us enlarged ideas of the extent of our country, and the magnitude of its internal commerce.

The chain of inland lakes upon which this vast trade is carried on is the longest on the globe. The territory drained by them has an area of over 500,000 square miles, of the most populous and productive lands in the Union. The extent of these great waters is as follows :—

	Length, miles.	Breadth, miles.	Area, sq. miles.		Length, miles.	Breadth, miles.	Area, sq. miles.
Lake Superior ..	420	160	32,000	Lake Erie.....	250	80	9,600
Lake Michigan...	320	100	22,000	Lake Ontario ...	190	40	6,300
Lake Huron	270	150	20,400				
Lake St. Clair ..	25	20	300	Total	1,475		90,600

The tonnage of the great lakes is now about 450,000 tons, valued at about \$20,000,000, and is divided among the several classes as follows:—

	No.	Value.		No.	Value.
Steamers.....	150	\$4,500,000	Brigs	100	\$1,000,000
Propellers.	200	5,000,000	Schooners	1,000	8,500,000
Barks.....	60	800,000			
Total.....				1,510	\$19,800,000

From the fall of 1857 to June last, this large amount of marine property, together with vast interests, docks and canal-boats, gradually declined in value. The total value of the lake marine was not to exceed \$14,000,000 or \$15,000,000. Warehouses could be bought at large discounts upon the original cost. Canal-boats rotted on the banks, or were sunk and deserted. Freights had run down to 3 a 5 cents per bushel on wheat from Lake Michigan ports to Buffalo, and from thence to New York in proportion.

From New York to Liverpool, in April last, only 5d. a 6d. could be obtained for wheat. Vessels went begging all over the world. From the great lakes some twenty vessels went into the ocean trade. Steam-tugs went from Lake Michigan to New Orleans and Galveston in search of employment or purchasers. Instead of an increased tonnage in 1859, for the country, of 500,000 tons, as usual, the increase fell off to 150,000 tons. And in place of the usual annual increase of 60,000 tons on the lakes, not 8,000 tons were added—or only half enough to cover the loss by destruction at sea. Nearly all the great transportation companies of the lakes were compelled to suspend, and the marine property was either bid in at nominal sums, or sold at ruinous prices. Vessel owners were the most pitiable of property holders, and their propellers and schooners rocked lazily against the deserted docks of the harbors. Two splendid propellers, that cost \$100,000, were bought last June by the New York Central Railroad Company for \$50,000, and this is a fair criterion for hundreds of transactions in vessel property—from last January to July. Fast-sailing schooners (A 1) of 20,000 bushels capacity, sold for \$7,000 and \$8,000, which cost, one or two years before, one dollar a bushel to build. The immediate cause of this downfall of the lake marine, was small crops, and a severe railroad competition. But the great crop of 1860 at home, and the short crop abroad, has changed the fortunes of the shipping interests of the country as much, perhaps, as of any business in the land. In New York, vessels now readily get 12d. a 13d. for wheat to Liverpool, and 500,000 bushels per week at that. From Chicago and Milwaukee, ever since harvest, vessels have had more than they could do at 16 a 20 cents per bushel for wheat to Buffalo. From Buffalo to New York, the price is 18 a 20 cents per bushel, and the tolls to the State have increased beyond all precedent.

This almost miraculous turn in the tide of marine tonnage, and consequent increased values, has made the fortunes of thousands of vessel owners throughout the country, and particularly of the great lakes. Vessels bought in June have already paid for themselves in many cases. Before the close of navigation, the grain fleets of these great waters will have cleared a sum equal to their entire nominal value in June last. It is a small estimate to say that the increased value of the entire lake tonnage is not less than \$10 per ton, or \$4,500,000.

In connection with this great increase in the values of shipping, and closely allied to it, is the warehouse property of the lake ports. Notwithstanding the great incentive to unusual activity, the vessels will leave half the surplus crop in the Northwest at the close of navigation, December 1st. For four months this will be brought forward to the lake ports—at Cleveland, Toledo, Detroit, Milwaukee, and Chicago—for storage. As the warehouse capacity of these ports is insufficient for the probable winter receipts, storage is now talked up to almost fabulous rates, and will unquestionably yield a handsome income to the owners.

Also in this same connection, the ship-building will again be renewed, not only on the lakes but throughout the country. As a large portion of this work is done in winter months, it adds to the business of the locality where performed,

at a season when most needed. The tonnage to be built at the different lake ports the coming season will reach 50,000 tons, valued at \$2,500,000.

We might continue to enumerate the various interests of the country, which have been favorably affected by the recent advance in marine property, until we had exhausted most of the employments of capital and labor. In the great crash of 1857 no branch of American enterprise and industry went to a more ruinous level than the mercantile marine, and it is gratifying that in the recovery no interest goes higher in the scale of prosperity. There is a poetical and practical justice that "they who go down to the sea in ships, that do business in great waters," should receive an ample compensation for the risks and perils of lake and ocean navigation.

THE RIGHT WHALING BUSINESS.

We are indebted to HENRY F. THOMAS, Esq., for the following table, which shows the importation of whale, elephant, humpback, and blackfish oil into the United States for the present and several years past, with an estimate of the amount to arrive during the remainder of the year, with other important statistics respecting the consumption and price of oil.

It will be seen by these figures that the stock on hand is very much less than a year ago, and that the expected arrivals are also less than in the latter half of 1859. The number of vessels employed in the business in the North Pacific, Ochotak, and Arctic seas is 51 less than last year, and has been decreasing several years. The inference from these facts is that the recent rise in oils is likely to continue, and a further advance is not improbable. One of our largest manufacturers, and a large purchaser within a few weeks, has acted on the belief that there was to be no more favorable time to purchase, for several months at least.

There has been imported, by the arrival of 107 ships, barks, etc., including freighters.....bbls. 114,404
Yet to arrive, including ships Black Sea and Syren, 14 vessels, with 17,208

Total..... 131,612

The import was in 1853 .bbls.	260,114	The import was in 1857. .bbls.	230,941
" " 1854.....	319,837	" " 1858.....	186,496
" " 1855.....	184,015	" " 1859.....	199,312
" " 1856.....	197,890	" " 1860.....	181,612

Showing the quantity to arrive in 1860 to be 67,704 bbls. less than in 1859, and 52,403 bbls. less than in any year since 1853.

Stock on hand in the United States on the first of January in each year as follows:—

1853.....bbls.	8,210	1857.....bbls.	45,000
1854.....	28,000	1858.....	92,193
1855.....	25,000	1859.....	82,191
1856.....	38,537	1860.....	95,245

Showing the consumption to have been in—

1853.....	240,324 bbls., average price	58½ cents per gallons.
1854.....	322,837 " "	58½ " "
1855.....	170,478 " "	71.3 " "
1856.....	191,427 " "	79½ " "
1857.....	183,749 " "	73½ " "
1858.....	196,498 " "	52 " "
1859.....	186,258 " "	48½ " "

Import from Aug. 1, 1859, to Jan. 1, 1860.....	bbls.	85,612
Estimated import from Aug. 1, 1860, to Jan. 1, 1861.....		17,208
Less.....		18,404
Stock on hand August 1, 1859, was.....	bbls.	145,000
“ “ 1, 1860, is.....		85,575
Less.....		59,425
The number of whaleships at the North in the year 1859, was—		
American.....		186
Foreign.....		27
Total.....		213
The number in 1860 is—		
American.....		141
Foreign.....		21
Total.....		162
Less number at the North this year than last, 51 ships.		

THE MADDER TRADE.

For the following statement of the madder trade we are indebted to Mr. CHARLES H. HAWES' *Monthly Madder Circular*, for July, 1860. The stock of French, in Boston and Providence, in importers' and speculators' hands, was 325 casks; Dutch, in Boston, 50 casks; Dutch garancine, in Boston, 40 casks; French madder, in New York, including lots to arrive not already contracted for, 616 casks; Dutch, in New York, in importers' and speculators' hands, 500 casks; Dutch and French garancine, in New York, 450 casks.

The following are the shipments of madder and garancine, from Marseilles to the United States to July 1st, 1860 :—

	Madder.	Garancine.
In January.....	casks 455	210
February.....	720	352
March.....	469	352
April.....	412	258
May.....	150	247
June.....	475	218
Total receipts for first six months.....	2,618	1,632

The following is the total shipment of madder and garancine, in casks, from Marseilles to New York and Boston, for the years following :—

	Madder.	Garancine.	Equal to madder.	Total madder.
1854.....	4,684	60	90	4,774
1855.....	6,551	296	444	6,995
1856.....	4,798	...	...	4,798
1857.....	3,286	170	255	3,541
1858.....	5,949	354	531	6,480
1859.....	3,566	1,412	2,118	5,684
Or total shipments for six years.....				32,272
Or an average per year of.....				5,379

The total imports of madder roots into Boston, for the month of June, 1860, was 400 bales.

By the above, it is shown that the importations of both madder and garancine, for the past six months, were only equal to the average importation of the past

six years for the same period of time, and estimating that the consumption should naturally increase, (now estimated at 6 a 7,000 casks annually in the United States,) and that, with the advanced prices on the other side, many orders will be cut off, it is but fair to look for a corresponding rise in price on this side, on all good and reliable brands. Many of our manufacturers fear to purchase here, thinking that they do not secure as pure an article as when ordered through their own agents abroad. There are some grounds for this belief, as very impure and mixed French, as well as Dutch, madders have been and are still imported, but it is doing our merchants great injustice to believe that there are none, or even but few, who can and do import madder free from all adulteration, and many of these goods are of the very same brands ordered by manufacturers themselves. By watching the markets closely, there are times when both articles can be bought to better advantage in our home markets than to be entirely bound to foreign markets. Madder root is likely to be more freely used hereafter, and several of our largest manufacturers now grind the article, their experience showing them that they obtain a better and more desirable color from the root ground here, than from the imported madder itself. The Smyrna root has thus far proved superior to all others imported, although several parcels are now on the way from Bombay, and in course of being ordered on trial.

COTTON PRODUCTION.

The *New York Shipping List* remarks :—Not a little anxiety has been excited among the cotton manufacturers of England by the prevalence of an opinion that the demand for cotton is increasing much more rapidly than is the slave population of the United States. It is supposed that each slave can produce a fixed quantity and no more, and that, as the increase of the number of slaves is limited by certain fixed natural laws, the limit of the production of cotton is defined by the ratio in which that part of the population is augmented. This method of estimating the prospective crops of the United States is commonly resorted to by writers and practical men in Europe, with all confidence that its results are as certain as the demonstrations of Euclid. It is singular that it should never have occurred to these parties that it might be well to test their calculation by the facts of experience. Nothing could be easier, and one would suppose nothing more accordant with common sense. To have done so, however, would have scarcely accorded with the purpose which writers on this subject across the Atlantic generally have in view, viz. : to depreciate the capacity of North America as a cotton producing country.

A simple comparison of any two decades in the history of our cotton crops would have shown the entire fallacy of their estimates. They would have ascertained that what they assume as a fixed fact, viz. : an unfluctuating proportion between the number of the slave population and amount of cotton produced, is in truth a mere fiction, and that consequently the ground work of their calculations is fallacious. It has not yet been ascertained what is the largest amount of cotton that can be produced by slave labor in this country ; for the crops have been constantly increasing in a larger proportion than has the slave population. In proportion as the value of cotton has advanced, the slave population has been drafted from other pursuits to the cotton plantations ; and hence it will be found

that the production of other staples in the South has progressed much less rapidly than has the growth of cotton.

In 1800, when the cotton crop was only 35,000 bales, the number of slaves in the country was 857,095, showing an average of twenty-four slaves to the bale. Twenty years later the number of slaves had nearly doubled, while the production of cotton had increased nearly fifteen fold, so that then there were three slaves to each bale of cotton. During the ten succeeding years the cotton crop increased in the ratio of seventy-five per cent, and the number of slaves thirty-three per cent, which brought down the number of slaves to each cotton bale to $2\frac{1}{4}$. From 1830, up to the present time, the proportion has continued to decline steadily, until now the production of cotton is as $1\frac{1}{4}$ bale to each of the slave population.

The following table shows this progress during each decade since 1800:—

	Crop, bales.	Slave pop- ulation.	Slaves per bale.
1800	35,000	857,095	23
1820	509,158	1,524,580	8
1830	870,415	2,005,471	$2\frac{1}{4}$
1840	2,177,532	5,486,226	$1\frac{1}{4}$
1850	2,796,796	3,204,051	$1\frac{1}{4}$
1860	4,500,000	4,000,000	9-10

It is strikingly apparent from this comparison that the number of the slave population is a most imperfect criterion by which to judge of the probable future production of this staple. Experience teaches us to expect a larger ratio of increase in the cotton crop than in the number of slaves; but how much larger the ratio will prove in the former case than in the latter, it is impossible to estimate. This must depend to a certain extent on the numbers that can yet be drawn from other kinds of labor by reason of the greater profitableness of cotton culture. But not by any means on this alone, nor perhaps on this chiefly. The most advanced planters have shown that very much may be done towards increasing the produce per acre by improved methods of culture. The history of agriculture during the last ten years shows that, by skillful management, land may be made to produce nearly double what it has yielded under old systems of culture; and there can be no doubt that the introduction of the same enlightened views among the Southern planters will issue in a large increase in our cotton crops, and the more so as the fertility of the virgin soil has to such a large extent become exhausted as to cause a need for artificial aids.

THE SUGAR TRADE OF SAN FRANCISCO.

The San Francisco Sugar Refining Company publish the following circular in relation to the sugar trade of that port:—

Estimated stock of sugar and syrup held in San Francisco, Nov. 1, 1860, (in first hands): Raw sugars—Light grocery grades of China, Batavia, and Siam, 5,078,000 lbs., do. for refining, (San Francisco Sugar Refining Co.,) 3,048,242 lbs. Yellow—Grocery sugars, including New Orleans, Sandwich Islands, and coffee crushed, 1,062,000 lbs. Refined sugars—Crushed, powdered, etc., Eastern and California manufacture, 1,456,000 lbs. Total, 10,644,242 lbs. Syrups—about 106,000 gallons.

Quantity of domestic refined sugars manufactured in San Francisco during

October, 1860 : White sugars—Crushed, powdered, etc., 2,310 bbls. and 1,330 boxes ; coffee crushed sugars, 912 bbls. ; syrup, 23,800 gallons.

Sugars on the way to San Francisco from Eastern ports : Manifested up to and including the *Skylark*, New York, Sept. 27, 1860, 5,093 bbls. and 1,596 half bbls. ; manifested up to and including the *Syren*, Boston, Sept. 26, 1860, 317 hhds. ; reported from Cuba direct, the *Emily W. Seabourne*, light muscovado sugar, about 700,000 lbs. (Advices of shipments from the Sandwich Islands, Manila, China, Siam, Batavia, and Calcutta are not received in advance of arrivals.)

Estimated consumption of sugar and syrup in California, Oregon, and British Columbia, per month, based on the consumption from 1st January, 1858, to 31st December, 1859, (24 months :) Refined sugars—Consumption in 24 months, 98,830 bbls. Yellow sugars—Consumption in 24 months equal to 67,072 bbls. In yellow sugars are included coffee crushed, West India, New Orleans, Sandwich Islands, Bally sugar from Calcutta and Mauritius, the whole imports in bbls., hhds., and bags, 24 months, deducting parcels taken out of the market for export or refining. East India sugars—Light grocery kinds, consumption in 24 months, 16,827,387 lbs. In this grade are included China, Siam, Batavia, Date, and Mexican sugars, taking total imports and deducting exports and parcels taken for refining. Average monthly consumption of sugar, 2,181,424 lbs., including 823,600 lbs. refined, 656,825 lbs. yellow, and 701,000 lbs. East Indies.

The population of the State has received but a slight increase since the average of the above dates. At the present time the arrivals and departures by the seaboard are about equal. The Indian troubles in the spring of 1860, have almost entirely prevented overland emigration.

The Pacific Refinery Company's works are in progress. It is expected to be in operation by the 1st of July, 1861—capacity about 10,000,000 pounds per annum. The two refineries in California will then be adequate to refine 22,000,000 pounds annually.

THE FUR TRADE OF THE WEST.

The *St. Louis Democrat* has some statistics showing the extent of the fur trade in that city, from which we find that the number of robes from the Upper Missouri is larger than last season's receipts. The collections from the Red River of the North, or the robes sold at St. Paul, are some 3,000 less than last year's, and a falling off of some 4,000 robes is also noted in the collections from the Upper Platte and Arkansas rivers, as the hunting grounds in that direction are becoming frequented by gold hunters, and the place of the Indian is being occupied by the whites. In the receipts from the Osage country there is a falling off this year of nearly one-half ; last season some 6,000 to 7,000 robes were had from that source—this year not exceeding 2,000 to 2,500.

The buffalo robes from the Upper Missouri this year, as we learn from the two houses which receive them, number 66,000, besides the usual proportion of other furs. Those from the Platte region 11,000, with some forty packs, or 500 robes, yet to come in, and from the Osage some 2,000 to 2,500—in all 79,600 buffalo robes, besides the red calf skins. These, at \$3 25 per robe, the price at which the main bulk has already been sold, amounts to \$258,700. Of these were re-

ceived 28,000 robes, together with the usual proportion of other furs, by the steamer *Spread Eagle*, recently arrived from the Upper Missouri, 350 miles above the mouth of the Yellow Stone, consigned to and sold by **ROBERT CAMPBELL & Co.** Since then the steamers *Key West* and *Chippewa*, which ascended the Missouri all the way to Fort Benton, arrived in St. Louis with **PIERRE CHOUTEAU & Co.**'s collection, consisting of 30,000 buffalo robes, 50 packages, or 1,300 red calf skins, 2,270 wolf skins, 2,800 prairie fox skins, 5,000 pounds deer, and 9,860 pounds elk skins; 8 bales of bear skins, 7 bales of antelope, &c. Thus making 66,000 buffalo robes from the country of the Blackfeet Indians at the head of the Missouri River, or some three thousand miles from the mouth of that stream. In round numbers, the receipts of robes at St. Louis this year may be placed at 80,000. These, it must be recollected, are all tanned by Indian squaws alone, the braves, or lords of creation, not stooping to such menial toil. They do the hunting alone. Immense numbers of buffalo are killed for meat alone, and in summer and other seasons when the skin is comparatively bare of wool or hair, and comparatively worthless. The robes taken in winter are best. Probably not over a tenth of those slaughtered furnish us robes; so that the whole number of buffalo killed during the season will reach 800,000; quite a sizable drove, yet one that would scarcely be missed out of the immense herds that yearly roam over the vast plains of the Missouri River.

The number of robes on the market this year will be considerably less than last season. Owing to the pressure of 1857, and the warm winter of 1858, large numbers of robes, some 50,000, were left over in New York.

TRADE AND PROSPECTS OF ST. MARY'S.

The *St. Mary's Advertiser* has been furnished with the following statement of the export traffic from St. Mary's during the past year:—

		Average price.	Total value.
Wheat	bush.	157,800	\$0 90
Barley, peas		8,450	0 50
Oats		79,075	0 28
Pork	lb.	187,370	0 06
Butter		45,000	0 12½
Timber	cubic feet	6,088,580	8 per M.
Sundries	lb.	993,719	0 5
Total		27,455,602	\$285,487 79

These returns are compiled from authentic sources. The classified articles of produce comprise the actual quantities purchased by the different buyers in the St. Mary's market, in the course of the last season. The timber and miscellaneous goods were purchased either in St. Mary's, or adjacent townships, and shipped from this station in the nine months ending June last.

As a wheat market, St. Mary's has hitherto labored under difficulties and disadvantages which will not cramp its operations in future. For some time during the briskest of the wheat buying season last year, our wheat market was almost shut against the farmers. The railway—embarrassed with the new arrangements of its through line—could not furnish cars for shipping more than a small proportion of the wheat brought in for sale; and there was then no storage accommodation in the village. Such impediments discouraged the larger

class of buyers from locating their agents here last season ; and the few buyers in the market were often brought to a dead lock by these and other incidental obstructions. Thus were the farmers often obliged to take the road to Stratford or London with their wheat, when they would have given St. Mary's the preference, had our market been properly accommodated.

For the ensuing year we have no such stringency to dread. The railway accommodation will be ample. There has been a new wheat store erected for Mr. McLEAN, at the railway switch, capable of storing 16,000 bushels of wheat, and several others are either built, or in the course of building, that will hold about 30,000 bushels more. We have been informed that two of the leading produce houses in Toronto intend to place agents this season in our market. We may therefore with confidence anticipate for our wheat market, in the ensuing season, abundant supply of accommodation, buyers and funds. Under such improved circumstances, and with the prospect of an abundant harvest, we make a moderate calculation if we multiply last year's wheat returns by three, to form an estimate of what we may expect to do in the ensuing season.

The population of St. Mary's, calculated from the last school census, is about 3,000. With such a population and so fair a prospect, the "Stone Village" cannot fail to secure the favorable attention of business people generally.

COTTON CULTURE ABANDONED IN INDIA.

Foreign papers contain the following very significant paragraph, showing that after all the protracted efforts to grow cotton in the British Indian possessions, the attempt has been at length abandoned as hopeless :—

In the annual report of the Bombay Chamber of Commerce a statement announces that the Indian Government had finally abandoned, as being hopeless failures, their experiments at cotton-growing in that country. These experiments had commenced as far back as 1789, and were prosecuted almost without intermission during the seventy-two years that have since elapsed. They had cost, from first to last, £350,000, and, as the report states, had absorbed "the energies and intelligence of governors, collectors, commissioners, American planters, and pains taking amateurs." Yet the result of all this prolonged effort and enormous outlay had been nothing but a continued series of disappointments. One solitary success is recorded as having been achieved, on "a small scale," by Mr. SHAW, Collector at Dharwar, who, taking up the enterprise in 1840, upon an area of only two hundred acres, developed the results so rapidly that in 1851 there were 31,688 "kupas" planted with American, and 224,314 with native cotton, and in 1856 the area increased to 156,316 kupas appropriated to the American, and 230,567 to the native variety of the plant. It does not appear that Mr. SHAW was assisted by any government grant in this work ; and, at all events, all direct co-operation of the State with the cultivation of cotton is now summarily abandoned.

FERRIES FROM NEW YORK.

	To Williamsburg.	Across the Hudson.
Number of ferries	4	4
Average length in rods	620	800
Greatest number of boats run	11	10
Smallest number of boats run	4	4
Average fare for foot passengers	2½ c.	2 c.
Rent paid for slips	\$7,000	\$12,000

JOURNAL OF INSURANCE.

FOREIGN INSURANCE COMPANIES IN NEW YORK.

LIST OF INSURANCE COMPANIES OF OTHER STATES THAT HAVE COMPLIED WITH THE INSURANCE LAWS OF NEW YORK, AND HAVE BEEN ADMITTED TO TRANSACT THE BUSINESS OF INSURANCE IN THE STATE OF NEW YORK, FOR THE YEAR 1860.

Fire insurance companies.	Location.	Fire insurance companies.	Location.
<i>Ætna</i>	Hartford, Ct.	Jersey City.....	Jersey City, N. J.
American Fire.....	Philadelphia, Pa.	Massasoit.....	Springfield, Mass.
Atlantic Fire and Marine.....	Providence, R. I.	Merchants.....	Hartford, Ct.
Char. Oak ".....	Hartford, Ct.	New Eng. Fire & Marine.....	" "
City Fire.....	" "	North American Fire.....	Boston, Mass.
".....	New Haven, Ct.	Norwich Fire.....	Norwich, Ct.
Commonwealth.....	Philadelphia, Pa.	Phoenix.....	Hartford, Ct.
Connecticut Fire.....	Hartford, Ct.	Providence Washington.....	Providence, R. I.
Franklin Fire.....	Philadelphia, Pa.	Reliance Mutual.....	Philadelphia, Pa.
Hampden Fire.....	Springfield, Mass.	Springfield Fire & Mar.....	Springfield, Mass.
Hartford Fire.....	Hartford, Ct.	State Fire.....	New Haven, Ct.
Hope.....	Providence, R. I.	Western Massachusetts.....	Pittsfield, Mass.

LIFE INSURANCE COMPANIES.

Insurance companies.	Location.	Insurance companies.	Location.
American Mutual Life.....	New Haven, Ct.	Mutual Benefit Life.....	Newark, N. J.
Connecticut ".....	Hartford, Ct.	National ".....	Montpelier, Vt.
Massachusetts ".....	Springfield, Mass.	N. Eng. Mutual ".....	Boston, Mass.

FOREIGN FIRE INSURANCE COMPANIES.

Company.	Location.
Unity.....	London, England;

FOREIGN LIFE INSURANCE COMPANIES.

Name.	Location.	Name.	Location.
Albion.....	London, Eng.	Royal.....	London, Eng.
British Commercial Life..	" "	Liverpool and London....	Liverpool, Eng.
Internal Life.....	" "	Colonial Life.....	Edinburgh, "

INSURANCE COMPANIES OF OTHER STATES AND FOREIGN COUNTRIES THAT HAVE BEEN REFUSED CERTIFICATES, WITH THE REASONS FOR SUCH REFUSALS.

Fire insurance companies.	Location.	Reasons for refusal.
Home.....	New Haven, Ct.	See annual report.
Girard Fire and Marine.....	Philadelphia, Pa.	" "
Great Western Ins. and Trust Co.....	" "	" "
Conway Fire.....	Conway, Mass.	" "
Hamilton Mutual.....	Salem, "	" "
Angusta Ins. and Bank Company.....	Atlanta, Ga.	" "
American.....	Boston, Mass.	Unites Ma. & Fi. risks.
Boylston Fire and Marine.....	" "	" "
Franklin.....	" "	" "
Neptune.....	" "	" "
Merchants.....	" "	" "
Manufacturers.....	" "	" "
Insurance Co. of North America.....	Philadelphia, Pa.	" "
Delaware Mutual Safety.....	" "	" "
Union Mutual.....	" "	See annual report.
Quaker City.....	" "	Unites Ma. & Fi. risks.
Roger Williams.....	Providence, R. I.	Assets not examined.
American.....	" "	Insufficient capital.
Elliott.....	" "	Unites Ma. & Fi. risks.
Merchants.....	" "	Statement informal.
Liverpool and London..	Liverpool, Eng.	Unites Ma. & Fi. risks.
Royal.....	London, "	See annual report.
		" "

FOREIGN FIRE INSURANCE COMPANIES IN MASSACHUSETTS.

NAMES, AGENCIES, AMOUNT OF PREMIUM RECEIVED, AND AMOUNT OF TAX PAID BY FOREIGN FIRE INSURANCE COMPANIES DOING BUSINESS IN MASSACHUSETTS FOR THE YEAR ENDING NOVEMBER 1ST, 1859.

Name of company.	Agencies.	Pre'm rec'd.	Am't tax
Aetna.....	Hartford,	15	57,856
Arctic.....	New York,	1	1,708
Atlantic, (F. and M.).....	Providence,	8	16,519
American Exchange.....	New York,	1	478,000
Beekman.....	"	1	119,240
City Fire.....	New Haven,	13	13,625
".....	Hartford,	9	9,543
Charter Oak, (F. and M.).....	"	13	13,565
Continental Fire.....	"	2	3,757
Connecticut.....	New York,	1	2,071
Delaware Mutual.....	Philadelphia,	1	17,415
Fulton.....	New York,	1	6,453
Goodhue.....	"	1	309
Hartford.....	Hartford,	15	27,820
Howard.....	New York,	1	2,644
Home.....	"	20	22,371
Humboldt.....	"	2	4,408
Indemnity.....	"	1	676
Irving.....	"	1	2,779
Lamar.....	"	3	2,310
Lafayette.....	Brooklyn,	1	83,613
Liverpool and London.....	London, Eng.,	1	22,864
Mercantile Mutual.....	New York,	1	11,804
Mercantile Fire.....	"	1	750
Manhattan.....	"	1	5,389
Metropolitan.....	"	3	6,559
Market.....	"	1	449
Merchants', (F. and M.).....	Providence,	2	1,638
Merchants',.....	Hartford,	5	5,136
Niagara.....	New York,	1	1,047
North American.....	"	1	5,494
Norwich.....	Norwich,	1	2,926
New England, (F. and M.).....	Hartford,	9	4,826
North American.....	"	3	10,075
Northern.....	London,	1	1,778
Phoenix.....	Hartford,	6	2,517
".....	Brooklyn,	1	2,286
Royal.....	Liverpool,	1	28,181
Resolute.....	New York,	1	396
Roger Williams.....	Providence,	2	1,819
Security.....	New York,	1	1,459
Standard.....	"	1	131
Unity.....	London,	1	3,382
Washington.....	Providence,	1	1,599

There is no data by which to determine the amount of loss sustained by these companies in the State, for the same period, given in the Massachusetts Commissioners' Report, from which we have taken our figures.

PENNSYLVANIA INSURANCE LAW.

A FURTHER SUPPLEMENT TO THE ACT, ENTITLED "AN ACT RELATIVE TO AGENCIES OF FOREIGN INSURANCE, TRUST, AND ANNUITY COMPANIES," APPROVED APRIL NINTH, ONE THOUSAND EIGHT HUNDRED AND FIFTY-SIX.

Whereas, The county of Wayne, by reason of its limited area, and small population, is deprived of the benefit of said act, as no foreign insurance, trust, or annuity company will pay the license fee required by said act; therefore—

SECTION 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania, in General Assembly met, and it is hereby enacted by the authority of the same, That the agent or agents of any such company or companies for the county of Luzerne, having complied with the terms of said act, shall be authorized to do business for such company or companies in said county of Wayne, and with like effect, and as fully as if the same were done in his or their proper county: *Provided*, That any party insured by any such agent or agents, within the county of Wayne, may prosecute any claim, growing out of such insurance, against such company or companies, in the Common Pleas of Wayne County; and in such case process shall, for such purpose, extend to Luzerne County, and be served on such agent or agents residing therein.

JOHN M. THOMPSON, Speaker of the House of Representatives, *pro tem*.
WM. M. FRANCIS, Speaker of the Senate.

Approved the second day of April, Anno Domini, one thousand eight hundred and sixty.

WM. F. PACKER.

LIST OF FIRE INSURANCE COMPANIES

BELONGING TO THE CHICAGO BOARD OF UNDERWRITERS, MARCH 18TH, 1860.

Name.	Location.	Name.	Location.
Astor.....	New York city.	Atlantic.....	Brooklyn.
Hanover.....	"	Montauk....	"
Park.....	"	Phoenix.....	"
Fulton.....	"	North Western.....	Oswego, N. Y.
Resolute.....	"	Buffalo Mutual.....	Buffalo.
Brevoort.....	"	Phila. Fire & Life....	Philadelphia.
Corn Exchange.....	"	Girard.....	"
Firemen's Fund....	"	Quaker City.....	"
Larayette.....	"	Prov. Washington....	Providence.
Commonwealth.....	"	Roger Williams.....	"
Home.....	"	Hope.....	"
Niagara.....	"	Charter Oak.....	Hartford, Ct.
Washington.....	"	Merchants.....	"
Citizens.....	"	Connecticut.....	"
Humboldt.....	"	Atlantic.....	"
Relief.....	"	Ætna.....	"
Lorillard.....	"	Hartford.....	"
Indemnity.....	"	City Fire.....	"
Arctic.....	"	North American.....	"
Lamar.....	"	Phoenix.....	"
Howard.....	"	New England.....	"
Manhattan.....	"	City Fire.....	New Haven.
Market.....	"	State Fire.....	"
Irving.....	"	Norwich.....	Norwich.
Ætna.....	"	Springfield.....	Springf'd, Mass.
Republic.....	"	Massasoit.....	"
Commercial.....	"	Hampden.....	"
Continental.....	"	Conway.....	Conway, Mass
Security.....	"	Western Massachusetts	Pittsfield, "
North American....	"	Commercial Mutual...	Cleveland, O.
Goodhue.....	"	Firemens'.....	Chicago, Ill.
New Amsterdam.....	"	City Insurance Co....	Peoria, Ill.
American Exchange...	"	North. Assurance Co..	London, Eng.
Mercantile.....	"	Unity.....	"
Standard.....	"	Liverpool and London.	"

NAUTICAL INTELLIGENCE.

PREVENTION OF COLLISIONS AT SEA.

Lieut. DANIEL AMMERI, of our navy, has prepared an admirable system of lights and helm signals for sail and steam vessels—one which, if introduced, will undoubtedly lessen the risks of collisions at sea. The collisions at sea, and on our lakes, have been so frequent during the past few years, that any means which will lessen the chances of such dangers should be at once adopted. Lieut. AMMERI's system has been submitted to the consideration of the Chamber of Commerce, and it is proposed to ask Congress to adopt it. The following are the details of his plan:—Steam vessels, when under way, will carry after night—

1. A bright white light at the foremast head, pivoted so as to remain perpendicular; showing from ahead to two points abaft both beams; a red light on the port side, and a green one on the starboard side. The side lights to show from ahead to four points abaft the beam on their respective sides, and to be filled with side-covering, so as not to show across the deck. The lantern to be made as per pattern, slung in gimbals, and not less in size, and of as good quality as those to be seen at the principal custom-houses, and prescribed for this class of vessels.

2. Propellers, when under steam, or steam and fore and aft sails, will carry the lights of steam vessels; but when under square sails, with or without steam, will carry the light of a sail vessel.

3. Steam vessels will employ the whistle when a collision is feared, as follows:—A long whistle (twenty seconds) will indicate that the vessel making the signal has put her helm to port. Two short whistles or blows, (two seconds each, separated by an interval of two seconds,) will indicate that the vessel making them has put her helm starboard, which must never be done except when the opposite course would throw the vessel into immediate danger, or to pass astern of a vessel whose course is nearly at right angles to her own, which would be shown by the lights.

4. In case two steamers should give *opposite* whistles, when standing nearly head on, both engines will be instantly stopped and reversed and the helms put apart, unless the lights of the other vessel should point out the answer. They will not go ahead until they have a full understanding, by the one repeating the whistle of the other, when they will act accordingly.

5. Steamers, when under weight in fogs, will employ the whistle at distances not greater than half a marine mile apart, as follows:—When steering north, one long whistle, (ten seconds,) followed, after an interval of two seconds, by a short whistle (one second.) When steering east, one long whistle, and after a similar interval, three short ones. Steering south, one long whistle, followed by two short ones. Steering west, one long whistle and four short ones. For N. E., S. E., S. W., and N. W., the signal of the north or south point will be made first, to be followed after an interval of five seconds by the east or west signal, omitting for the last, the long whistle, thus, N. E. would be a long whistle followed by a short one, an interval of five seconds and three additional short ones. Steamers should whistle as near the course they may be steering as possible, which can always be done within two points.

6. Sail vessels, when under way after night, will carry a bow lantern, having a visible arc of 225° ; 90° on the port side being screened red, and 90° on the starboard side green, leaving between them a white or unscreened arc of 45° . Care must be taken to fit the center, or white section, to show directly ahead. It will be carried on the bowsprit cap when the weather will admit, and in heavy weather to show under the foot of the foretopsail, and secured to the mast. In fore and aft vessels it may be fitted on any part of the foremast that will effect the object. In every case it must be pivoted so as to remain perpendicular when the vessel heels, and will be of the size and pattern to be seen at the principal custom-houses.

7. Sail vessels will be provided with a flash pan as per pattern; also a suitable powder flask and percussion caps convenient for immediate use.

8. When thrown upon a vessel on the starboard tack, a white or green light on her lee bow, as a precaution, and to forewarn the other party, flashes may be made, but not doing so will not make the starboard tack culpable in the event of collision. She has the right of road; but for her own safety, she should forewarn, and even go about if necessary, when coming suddenly on a sail in thick weather.

9. When those upon a vessel on the port tack see a white or red light on her lee bow, and there is danger of collision, she will bear away until the light is abeam, and come up to course as it draws aft. The port tack must always give way when meeting another vessel by the wind on the opposite tack.

10. Vessels going free will be enabled to pass astern of vessels by the wind, through the color of the bow lanterns as seen by them. If those upon a vessel going free, see a green light, it may be necessary to put the helm starboard, or if a red one, a port, to pass astern. In all cases it is the duty of the vessel going free to avoid the collision.

11. Those upon a vessel on either tack seeing a sail to windward going free, (as will be known by seeing a white light,) may make flashes as a warning, but a failure to do so will not imply neglect, or relieve the other party from the responsibility of a collision.

12. Those upon sail vessels in fogs will use a "fog horn" at suitable intervals, as follows:—When by the wind on the port tack, one blast; when by the wind on the starboard tack, two distinct blasts; when the wind is from four points on the port quarter to abeam, five distinct blasts; when the wind is from four points on the starboard quarter to abeam, three distinct blasts; with the wind further aft, four distinct blasts.

13. A steamer will slow down or stop engine if necessary, and indicate to sail vessels as to steamers how she has put the helm. A long whistle (twenty seconds) a-port, two short ones (of ten seconds each) a-starboard. The sail vessel will always act in accordance with signal when it is heard. (This is to meet such cases as occur in thick weather, when the distance may be so short as to require the prompt action of both parties.)

14. In case of collision, it is the absolute duty of vessels to endeavor to remain by one another until the extent of injury is ascertained, and in case a steam vessel should require assistance, it will be asked by a long continued use of the steam whistle; and if a sail vessel, a continued use of the flash-pan.

15. All vessels at anchor will hoist after night a lantern showing a bright white light all around the horizon.

16. A failure to be provided with a proper lantern or lanterns, or to keep them properly placed and lighted, or to have flash-pan ready for use, or to use steam whistle or "fog horn" as directed, will subject the captain or culpable person in case of loss of life through collision, to trial for manslaughter, and upon conviction thereof, to its penalties, and in case of no loss of life, to a fine not exceeding \$—.

17. All vessels will carry "regulations" as established by law, conveniently placed for reading in the apartment of all persons having charge of the deck, as well as in the captain's cabin. A failure to do so will subject the captain to a fine not exceeding \$—.

COMMERCIAL REGULATIONS.

RATES OF FREIGHT.

The following is the schedule of rates to the principal points East and West, as established by the freight agents :—

Cincinnati to—	1st class.	2d class.	3d class.	4th class.	Flour.
New York, all rail.....	\$1 35	\$1 05	85	55	\$1 10
" rail and water.....	1 27	97	80	50	1 00
Boston, all rail.....	1 45	1 18	90	60	1 20
" rail and water.....	1 37	1 05	85	55	1 10
Philadelphia, all rail.....	1 20	95	80	50	1 00
" rail and water.....	1 12	87	75	45	90
Baltimore, all rail.....	1 10	85	70	45	90
" rail and water.....	1 02	77	65	40	80
Buffalo, all rail.....	66	55	45	30	55
" rail and water.....	58	47	40	25	45
Dunkirk, rail and water.....	58	47	40	25	45
Albany, Troy, and Schenectady, all rail....	1 35	1 08	88	55	1 10
" rail and water.....	1 28	98	83	50	1 00
Detroit.....	40	35	25	20	40
Cleveland.....	40	35	25	20	40
Toledo.....	40	35	25	20	40
Chicago, all rail.....	75	60	50	35	..
Milwaukee, all rail.....	75	60	50	40	..
Sandusky, all rail.....	40	35	25	20	40
From Indianapolis to—	1st class.	2d class.	3d class.	4th class.	Flour.
Boston, rail.....	1 56	1 18	98	60	1 20
" rail and water.....	1 42	1 10	88	55	1 10
New York, rail.....	1 40	1 10	88	55	1 10
" rail and water.....	1 32	1 02	83	50	1 00
Philadelphia.....	1 25	1 00	83	50	1 00
Baltimore.....	1 15	90	73	45	90
Buffalo, rail.....	66	55	45	30	60
" rail and water.....	58	47	40	25	50
Dunkirk, rail and water.....	58	47	40	25	50
Pittsburg.....	58	47	40	25	50
Bellair.....	45	40	35	23	45
Bridgeport.....	49	44	39	27	53
Cleveland.....	40	35	25	20	40
Sandusky.....	40	35	25	20	40
Columbus.....	40	33	23	15	30

Grain same as fourth class.

The above rates were concurred in by the committee of five presidents, who also established the following prices to Southern points, being an advance of about five cents per cwt. on previous rates :—

Cincinnati to—	4th class.	Pork.	Whisky.
Richmond, Va.....	58	1 84	1 87
Petersburg, Va.....	60	....	1 95
Charleston, S. C.....	70	....	2 17

The rate for flour to Charleston was fixed at \$1 35.

From Louisville to—	1st class.	2d class.	3d class.	4th class.	Flour.
New York, rail.....	1 45	1 15	95	60	1 20
“ rail and water.....	1 40	1 10	90	55	1 10
Boston, rail.....	1 55	1 25	1 00	65	1 30
“ rail and water.....	1 50	1 20	95	60	1 20
Philadelphia, rail.....	1 30	1 05	90	55	1 10
Baltimore, rail.....	1 20	95	80	50	1 40
Buffalo, rail.....	75	65	55	40	90
“ rail and water.....	70	60	50	38	60
Detroit.....	60	50	40	25	20
Milwaukee.....	95	75	65	55	50
Portland.....	1 55	1 25	1 07	75	1 55
Quebec.....	1 65	1 35	1 10	75	1 55

PLOW STEEL.

THE TREASURY DEPARTMENT, October 20, 1860.

SIR:—I acknowledge the receipt of your report of the 27th ultimo on the appeal of Messrs. COURTNEY & TENNENT from your decision assessing a duty of 15 per cent under the classification in schedule E of the tariff of 1857, of “steel, not otherwise provided for,” on certain bundles and plates of steel not less, each, than six inches in width, nor more than $\frac{3}{4}$ of an inch in thickness, imported by them, and invoiced as “German steel,” and denominated “plow steel,” as indicating the purpose for which they are designed. The importers claim entry at 12 per cent under the classification in schedule F of “steel in bars, cast, shear, or German.” The articles in this case are not considered as “bars” by the Custom-house officials at the principal ports, within the meaning of the law and the sense of that term as used in commerce, and in that view the Department concurs. It is unnecessary to decide whether the steel in question is “cast, shear, or German,” it not being imported in the form that would entitle it to entry under the classification claimed by the importers. Your assessment of a duty of 15 per cent as “steel not otherwise provided for,” under schedule E, is affirmed. I am, very respectfully,

HOWELL COBB, Secretary of the Treasury.

WM. F. COLCOCK, Esq., Collector, &c., Charleston, S. C.

SILVER WATCH CASES.

THE TREASURY DEPARTMENT, October 29, 1860.

SIR:—I acknowledge the receipt of your report of the 15th ultimo on the question presented by the appeal of Messrs. PALMERS & BATCHELDERS as to the rate of duty to be charged on an importation of silver watch cases. The only essential points presented are, whether the cases in question, without any movements or works, are to be regarded as “parts of watches,” and, if so, whether those now in controversy are finished or unfinished; a duty of 8 per cent having been levied by you under the classification in schedule G of “watches and parts of watches,” and the importers claiming to enter them at 4 per cent under the classification in schedule H of “watch materials and unfinished parts of watches.” I am of the opinion that the case may be considered, within the fair meaning of the law, as a “part” of the “watch,” and this construction is believed to be fortified by the usages of the trade, as well as its special fitness for that purpose and no other. It would seem, also, from an inspection of the sample submitted, that the cases, in this instance, must be regarded as “finished,” no substantial addition or change being required to adapt them at once to the purposes intended. Your decision assessing a duty of 8 per cent under the classification in schedule G of “watches and parts of watches,” is affirmed. I am, very respectfully,

HOWELL COBB, Secretary of the Treasury

JAMES S. WHITNEY, Esq., Collector, &c., Boston, Mass.

POSTAL DEPARTMENT.

UNITED STATES POST-OFFICE.

The report of the Postmaster-General for the year ending June 30, 1860, gives the following as the revenue and expenditure of the Department:—

— The expenditures of the Department in the fiscal year ending June 30, 1860, amounted to \$19,170,609 99, viz:—

For transportation of inland mails, including payments to route agents, local agents, and mail messengers		\$13,485,225 70
For transportation of foreign mails, to wit:—		
Between New York, Southampton, and Havre...	\$280,843 42	
Between Liverpool, New York, and Philadelphia.	50,795 48	
Between New York, New Orleans, and Havana .	10,210 92	
Between New York and Havana	48,913 81	
Between New Orleans and Vera Cruz	1,911 15	
Between New Orleans and Havana.....	7,497 88	
Between Portland and Liverpool.....	74,451 97	
		469,624 18
Between New York and San Francisco.....	\$187,500 00	
Mails across the Isthmus of Panama.....	75,000 00	
Panama and Astoria mails.....	94,384 50	
Expenses of mail agents.....	1,920 47	
		358,804 97
For compensation to postmasters		2,562,888 10
For clerks in post-offices.....		966,639 47
For ship, steamboat, and way letters		18,658 08
For office furniture for post-offices		2,214 80
For advertising ..		38,778 94
For mail bags.....		56,710 39
For blanks.....		164,517 61
For mail locks, keys, and office stamps		8,082 30
For mail depredations and special agents		46,194 77
For postage stamps.....		47,848 00
For stamped envelopes.....		50,162 27
For wrapping paper.....		36,606 78
For payments to letter carriers		208,506 22
For repayments for dead letters		14 61
For interest under act February 15, 1860		141,066 03
For miscellaneous payments		213,777 72
For payments for balances due on British mails.....		260,035 44
For payments for balances due on Bremen mails		28,459 55
For payments for balances due on Hamburg mails.....		17,384 77
For payments for balances due on French mails.....		86,161 55
		\$19,170,782 15
Deduct for transportation in 1859	\$3,771,050 87	
Deduct payments under other heads of appropriations for 1859	524,958 89	
		4,296,009 26
Leaving the actual expenditure for 1860		\$14,874,772 89

On the 30th of June last, there were in operation 8,502 mail routes. The number of contractors was 7,445. The length of these routes is estimated at 240,594 miles, divided as follows, viz:—

Railroad	27,129	Coach.....	54,577
Steamboat... ..	14,976	Inferior modes	143,912

The gross revenue for the year 1860, including receipts from letter carriers and from foreign postages, amounted to \$8,518,067 40, as stated below:—

Letter postage	\$851,162 17
Registered letters	25,038 84
Stamps sold	6,706,395 20
Newspapers and pamphlets	627,086 59
Fines	5 00
Receipts on account of emoluments	91,694 04
Receipts on account of letter carriers	208,506 22
Receipts on account of dead letters	8,803 68
Extra compensation overcharged	273 02
Miscellaneous receipts	4,232 64
Total revenue	\$8,518,067 40

Being an increase of near seven per cent over the revenue of the year ending June 30, 1859.

The total annual transportation of mails was 74,724,776 miles, costing \$8,808,710, and divided as follows, viz:—

Railroad, 27,653,749 miles, at \$3,349,662, about 12.11 cents a mile.
 Steamboat, 3,951,268 miles, at \$1,073,852, about 20.7 cents a mile.
 Coach, 18,653,161 miles, at \$2,550,365, about 13.67 cents a mile.
 Inferior modes, 24,466,598 miles, at \$1,834,831, about 7.45 cents a mile.

Compared with the service reported June 30, 1859, there is a decrease of 19,458 miles in the length of mail routes; of 7,583,626 miles in the annual transportation, about 9.20 per cent; and of \$660,047 in the cost, about 7 per cent.

The aggregate length of railroad routes has been increased 1,119 miles, and the annual transportation thereon 385,465 miles, about 1.4 per cent, at a cost of \$105,688, or 3.25 per cent.

The length of steamboat routes is diminished 4,233 miles; the annual transportation 618,694 miles, about 13.53 per cent; and the cost \$83,991, about 7.25 per cent.

The length of coach routes is decreased 8,464 miles; 4,795,237 miles in annual transportation, about 9.45 per cent; and in cost \$98,015, or 5.07 per cent.

Appended to this report is a table showing in detail the mail service of every grade, as existing in each separate State and Territory on the 30th June last.

The lettings of new contracts for the term commencing 1st of July last, embraced five States—New Jersey, Pennsylvania, Delaware, Maryland, and Ohio.

The following table shows the new service as in operation on the 30th of September:—

	Miles in length.	Miles of annual transportation.	Cost.
Railroad	6,473	6,559,627	\$849,866
Steamboat	847	174,408	17,002
With celerity, certainty, and security	24,999	7,057,866	382,138
Total	31,819	13,801,901	\$1,249,001

Compared with the service on the 30th of June last, the length of routes by railroad is diminished 57 miles, and by steamboat increased 42 miles; the coach and inferior mode of service in this section having been merged into one class at the last letting, styled "star" or with "celerity, certainty, and security," there is shown an increase of the latter over the former combined of 354 miles in the length of routes; the annual transportation is increased 1,246,448 miles, and the cost \$45,008.

On the 30th of June last, there were in the service 474 route agents, at a compensation of	\$372,240
40 local agents, at a compensation of	25,479
1,649 mail messengers	208,948
68 railroad baggage-masters in charge of the express mails, at a compensation of	8,100
	<hr/> \$614,767

This amount added to the cost of service as in operation on the 30th of June

Makes the total on the 30th of June last

8,808,710

\$9,428,477

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

BALTIMORE AND OHIO RAILROAD.

The twenty-fourth annual report of this great work contains the following account:—The aggregate revenues, working expenses, and net results of the Main Stem, Washington Branch, and Northwestern Virginia Railroad, for the fiscal years, terminating respectively 30th Sept., 1859 and 1860, have been, viz. :

REVENUE.			
	1859.	1860.	Increase.
Main Stem.....	\$3,618,618 45	\$3,922,202 95	\$303,584 49
Washington Branch.....	442,219 53	442,880 44	20,660 91
Northwestern Virginia Railroad ..	240,171 29	269,208 12	29,037 83
Total.....	\$4,301,009 27	\$4,634,286 50	\$353,277 23

EXPENSES.			
	1859.	1860.	Decrease.
Main Stem.....	\$1,684,997 84	\$1,616,615 61	\$68,382 23
Washington Branch.....	173,679 25	173,042 33	636 92
Northwestern Virginia Railroad..	198,279 58	194,586 65	3,683 93
Total.....	\$2,056,947 67	\$1,984,244 59	\$72,703 08

Total increase of gross revenue..... \$353,277 23

Total decrease of working expenses..... 72,703 08

Total increase of net earnings..... \$425,980 31

An aggregate reduction is shown of \$72,703 08 in working expenses, compared with the preceding year, although the large additional traffic has improved the revenue \$353,272 23, making an increased net gain of \$425,980 31. The same comparison with 1858 exhibits an increase of gross revenue of \$80,373 73, and a reduction in working expenses of \$1,002,661 13, presenting an increased net gain of \$1,083,034 86.

The progress of the sinking funds, for the past five years, is presented in the subjoined statement:—

SINKING FUNDS FROM 1ST OCTOBER, 1856, TO 30TH SEPTEMBER, 1860.

Totals of the three sinking funds for five years from 1st October, 1856, to the 30th September, 1860.		Sinking fund for the redemption of the Five million loan.			Mortgage Ground rents debts. on Cam. stat'n.	
1856	\$489,086 17	1856....	\$412,144 51	\$20,000 00	\$26,941 66	
1857.....	683,754 41	1857....	510,979 42	137,333 33	35,441 66	
1858.....	937,294 13	1858....	616,675 81	270,668 66	46,941 66	
1859.....	1,145,556 42	1859....	671,614 76	413,221 73	60,719 93	
1860.....	1,356,371 35	1860....	712,846 36	568,555 06	74,969 93	

The increase from \$489,086 17 in 1856 to \$1,356,371 35 in 1860, proves the system adopted by the company to be successful. In addition to the accretions from the interest on the investments held in the sinking funds, it will be recollected that, under the resolution adopted on the 17th Dec., 1856, \$113,333 33 are to be annually appropriated to the reduction of the mortgage debts, and \$6,000 are also to be invested for the redemption of ground rents on Camden Station. Upwards of \$200,000 per year are now withdrawn from the current

earnings, for the purchase of the mortgage bonds and indebtedness of the company. Ample provision is thus wisely made for the payment of the entire funded debt.

The company has since proceeded in the delivery of the bonds of 1862, and in the payment in full of the entire amount of interest accrued.

TOLEDO CANAL TRADE.

The Toledo *Blade* remarks:—In looking over the table of canal receipts and shipments published in our commercial column, one can but notice the evidences of a great change in the mode of transportation since the opening of our Southern and Southwestern lines of railroads. The canal once brought in nearly all our produce, and took away our merchandise for the interior. That this state of things is greatly changed, the figures abundantly show—and more than this, they show that for many kinds of freight the railroads are preferred more and more every year. Rates and competition affect this somewhat, but in the following recapitulation of the receipts and shipments of a few leading articles for the past three years, it will be seen that items in which our business has largely increased during this time, have fallen off, or have barely held their own, in the annual returns of canal business:—

RECEIPTS.

Articles.	1858.	1859.	1860.
Flour.....bbls.	149,629	162,490	149,720
Wheat.....bush.	1,347,155	765,938	1,161,809
Corn.....	938,366	120,505	1,798,671
Barley.....	8,012	3,984	519
Rye.....	4,781	370	.....
Oats.....	24,808	5,915	115
Pork and bacon.....bulk	1,007,719	1,114,348	824,240
Pork.....bbls.	6,608	7,426	3,527
Beef.....	357	2,064	748
Staves.....No.	970,671	1,708,975	1,172,709
Lumber.....feet	368,522	1,326,237	1,440,316

SHIPMENTS.

Fish.....bbls.	2,173	1,076	2,679
Salt.....	65,155	71,514	56,145
Oats.....bush.	83,399	47,990	23,676
Barley.....	33,142	100	44,731
Rye.....	.....	.....	10,814
Shingles.....	5,831,500	11,996,754	6,339,000
Lath.....	4,392,884	5,028,566	5,892,000
Lumber.....feet	10,857,950	12,813,716	10,667,141

In the face of an immense increase in our grain receipts over 1858, it will be seen that the canal shows a falling off on wheat, just holds its own on flour, and only shows an increase in the item of corn. The decrease in pork and beef is, also, somewhat under like circumstances. In oats there is a decrease both in receipts and shipments. So far as barley is concerned, Toledo has shipped to the interior more than she has received from that direction, and has imported several cargoes from Canada. Staves show an increase, indicating a fair degree of gain in this pretty extensive item of our business.

RAILROAD STATISTICS—THE MAGNITUDE OF INTERESTS INVOLVED.

The *Railroad Record* says :—Our readers well know that there are now in the United States nearly 30,000 miles of railroad in operation. This fact, when we consider it in relation to the newness of the country, the little time required to accomplish it, the vastness of capital suddenly invested, and the extraordinary change produced in commercial movements, is one of overwhelming magnitude. Certainly no one who lived twenty years ago would have believed it possible, or would believe it now without the evidence of his own eyes and that of others. It typifies, more than any other element in the country, the commercial spirit of the age. For all this is done merely to produce a *quicker movement* of commerce. It is not commerce itself, but merely one of the machines it employs. If, then, commerce can afford to expend such vast sums for a machine to facilitate its own movement—a mere carriage—of what immense magnitude and value must that commerce itself be? Every year gives more and more evidence of the absorbing influence of commerce over all other things. What is to be its limit we cannot imagine. Machinery takes the place of all natural operations, and even the simple employments of agriculture seem to give way before the introduction of commercial appliances. We would confine ourselves here, however, to the mere statistics of this machine—the railroad. Let us take out a few elementary facts in this vast machinery. We cannot arrive at exactness, but, having the *units* of certain of the most important roads of the country, we may safely take them as a basis for the whole :—

Length of roads..miles	80,000	Passenger cars	5,000
Aggregate cost.....	\$1,176,000,000	Freight cars.....	80,000
Locomotives.....	6,000	Passengers carried....	42,000,000
Wood consumed...cords	3,000,000	Freight carried...tons	36,000,000
Employees.....	80,000	Gross receipts.....	\$120,000,000

Taking these aggregates, we have some curious consequences :—

1. The capital employed in railroads is about double that of all the incorporated banks of the United States. 2. The gross receipts on railroads is a good deal more than the income (or profits) of all the banks. 3. But when we compare the operations of the two machines we find this important difference, that the cost of operating the banks is very small, while the cost of operating the railroads is very great. In one case capital only is handled, while in the latter, not only capital, but a vast and cumbrous machinery of men, vehicles, and roads. There is another difference also. Banks have the power to create capital, in the shape of paper money, on which they make a profit without any cost. Railroads cannot do this. It is obvious that, as the laws now are in the United States, banks enjoy superior advantages. Notwithstanding, well-managed railroads, in good position, have yielded large profits. In time, four-fifths of all the roads will be good stock. 4. The number of locomotives is at least 6,000, or one to each five miles. Taking into view the new roads and the repairs, we may assume that one-fifth of these (1,200) must be renewed each year, which, at an average cost of \$9,000 each, amounts to an expenditure of \$10,000,000 a year for locomotives alone. Passenger and freight cars will be \$5,000,000 more, and thus we have \$15,000,000 per annum paid for making carriages only for the use of railroads. 5. The 80,000 employees we may put down at a dollar per day, although that must be too low—the officers' salaries being generally high. This

is \$24,000,000 per annum. 6. For labor and material, railroads pay at least \$40,000,000 per annum, independent of the iron superstructure. 7. Let us now regard this as an economical element in the country, as it regards other vocations. We may regard 100,000 men as the unit, furnished by railroads, to be supplied with food from the agricultural resources of the nation. The relative proportion, in families, shows that each able-bodied man is equivalent to a population of four times the number. We have, then, 400,000 persons, subsisting upon the receipts of railroads, to be supplied with food. Taking meat and bread alone, this will require 4,000 lbs. of each per day—equal in value to \$12,000,000 per annum. In the two articles of meat and bread the railroads pay farmers this great sum of money. We need not pursue the inquiry in detail any further. It is obvious, that for timber, iron, paints, mechanical aid, etc., the roads must pay millions more, which go into the pockets of farmers and mechanics—and thus many more laborers are employed, and great sums of money circulated through the country. As an economical machine, the railroad is of great value to the country. Here we may compare it with the banks, which have no connection with the labor of the country whatever. The banks reap the largest profits for themselves, but the railroads are of much the greatest value to the people. 8. Another element of great importance is the consumption of wood or fuel. Supposing it to be wood alone, (as it is mainly,) the cost of fuel, at an average of \$2 per cord, is \$6,000,000 per annum. This also is mainly paid to farmers. If this wood averages 50 cords per acre, it will require 60,000 acres of woodland to supply this demand per annum. It probably requires more, for the yield is probably not so much per acre. 9. The statistics show that 42,000,000 passengers pass over the roads each year. If so, each one of the whole American population would average one trip and a half.

RAILWAYS IN SWITZERLAND.

The *Price Current* gives the following, relating to the Swiss railways :—

The railway system of Switzerland is making rapid progress. It already furnishes an almost unbroken connection between all the most considerable towns of the confederacy, and bids fair soon to scale the gigantic barrier of the Alps, and to form a junction with the roads which in various directions cross the great Lombard plain and penetrate the mountain regions of Piedmont on the west and south. The Swiss Central Railway, leading from Basil towards Berne, after piercing the mountain wall of the Hauenstein, by a tunnel twenty-seven hundred yards in length, branches or falls into other roads, which run in every direction. From Olten a line runs northeast to Baden, Zurich, St. Gall, and doubling the mountain cape, at the entrance of the Rhine into Lake Constance, it ascends for the most part the left bank of that river to Chur in the Grisons. From Aarburg another line runs to Lucerne. A third, from Herzogenbuchsee, by Solothurn, Neuchâtel, Yverdon, and Lausanne, extends to Geneva, having only a small link yet incomplete along the Lake of Bienné; and yet a fourth, from the same point to Berne and Thun. Here the last named line strikes the stupendous mountain range of the Bernese Oberland. The Jungfrau, Eiger, Monch, Schreckhorn, and Finster-Aarhorn will hardly permit their untrodden snows, during the present century, to be trampled by the hoofs of the iron horse. A road is in progress from Berne to Lausanne, by the way of Freiburg, and on the first of the present month was opened as far as the latter city. Another, passing from Lausanne around the eastern end of Lake Geneva, will soon connect the city of Geneva with the so-called Italian line in the Vallais. This latter railway ex-

tends from the eastern end of the lake up the valley of the Rhone. During the present season it has been completed as far as Sion. From this point, the capital of the Canton, it is to be carried to Brieg, and is destined to scale the Alps, by the great Simplon pass. A line across the Alps is also in contemplation further east by some one of the Grison passes; and I have recently read an article in one of the Swiss journals, warmly defending the claims of the Lukmanier route, by the valleys of the Vorder, Rhine, and Medels, which was surveyed some years since.

In my last I gave some account of my visit to the field of Morgarten. In this I must transport myself to the Canton of Berne. The approaching evening of one of the last days of June found me seated in one of the railway trains, on the line between Herzogenbuchsee and Berne. Two years since, on this line, the passengers were obliged to alight some two miles north of the city, to which they were conveyed by omnibusses. At present, as above stated, the line is finished to Thun. Passing the former terminus, the road crosses Aarby, a bridge suspended at a fearful height above the river-bed, and reaches the elevated peninsula, upon which the town is built, in the rear or western extremity of the city. Here I found a magnificent depot, corresponding in the solidity of its structure with the well known massive architecture of Berne.

RAILROADS AND TRADE OF THE LAKES.

As the statistical tables show that the great trade of the lakes is mainly derived from the Ohio and Mississippi, and as the distance on the several railroads and canals leading to the lakes is greater than from Pittsburg to Philadelphia, with the fact that the distance and cost of transportation on the rivers and lakes are the same, it will be seen that the cost from any of the points on the Mississippi or the Ohio to Buffalo will vary but little from the cost to Philadelphia. This important fact, if true, will change materially the destiny of trade, and, if not looked into, may seriously affect the interests of our city. From Cairo to Chicago the distance by the Illinois Central is 367 miles, which, as the average, is fixed at 3 cents per mile, the cost would be \$11 01 per ton; thence to Buffalo, by the lake, (about 1,000 miles,) the cost for transportation, at three mills per ton per mile, would add \$3 per ton—making \$14 01 from Cairo to Buffalo. From Cairo to Pittsburg the distance, by river, is 950 miles, which, at 3 mills per ton, the cost would be \$2 85; thence to Philadelphia, by the Pennsylvania Central, (353 miles,) at 3 cents per ton per mile, the cost (\$10 59) would make \$13 44, and leave 57 cents in favor of Philadelphia. On any of the other routes the results are the same—or so near it that it is not worth while to make the estimate. From Cincinnati to Buffalo the cost is \$8 23, and thence over the Central, to New York, the entire cost to New York is \$17 61, while through Pennsylvania \$12 98 covers all the expense from Cincinnati to New York.

THE FIRST AFRICAN RAILWAY.

The first African railroad was inaugurated the 25th June last. It is called the Natal Railway, and connects the capital of the colony, Petre Maritzburgh, with Cape Town. The whole enterprise has been successfully carried through by the colonists, no foreign aid having been received, and very important advantages are expected to arise from the sure and rapid communication between the interior and the coast. A train in motion was, of course, an extraordinary novelty for the natives, and many of the Caffres at first tried to measure fleetness with the iron horse, but they soon had to give up the race.

PHILADELPHIA HORSE RAILROADS.

The capital of England and the money center of the world is about to yield to the innovation of city passenger railroads; for, at the next session, Parliament will undoubtedly pass a bill authorizing their construction, under such restrictions and limitations as may be supposed judicious.

The following shows the length of road and number and amount of shares authorized by passenger railroad companies in the city of Philadelphia :—

Name of road.	Length of single track.	No. of shares (\$50) au- thorized.	Amount of capital authoriz'd.
Fifth and Sixth streets..... miles	16½	10,000	\$500,000
West Philadelphia.....	12½	10,000	500,000
Tenth and Eleventh streets.....	7½	10,000	500,000
Spruce and Pine streets.....	6½	20,000	1,000,000
Race and Vine streets.....	6	10,000	500,000
Second and Third streets.....	18	10,000	500,000
Philadelphia and Darby.....	5	10,000	500,000
Girard College.....	6	10,000	500,000
Green and Coates streets.....	10	10,000	500,000
Arch-street and Fairmount.....	5½	10,000	500,000
Ridge-ave. and Manayunk.....	8½	10,000	500,000
Fourth and Eighth (Germantown).....	19	10,000	500,000
Richmond and Schuylkill.....	7	2,000	100,000
Hestonville and Fairmount.....	7	8,000	300,000
Seventeenth and Nineteenth.....	6	10,000	500,000
Chestnut and Walnut.....	4	10,000	500,000
Thirteenth and Fifteenth.....	6	10,000	500,000
Delaware Company, (24th Ward).....	4	8,000	150,000
Total.....	154½	174,000	\$8,550,000

Some of the companies have issued the whole number of shares authorized; others have issued over \$100,000 worth of stock per mile of single track laid. Nearly all of them have funded debts secured by mortgage upon their depots, cars, horses, and rails. It is estimated that the actual outlay in building and equipping the eighteen roads was about \$2,000,000. This includes an investment of about \$300,000 in cars, mostly built within the limits of the city, and about a half million of dollars in depots and other real estate, out of which both land speculators and mechanics have made good profits.

PROSPERITY OF HOUSTON, TEXAS.

A letter from Houston, Texas, with which New Orleans is soon to be in direct railroad communication, says:—Between 800 and 1,000 men are daily engaged in beautifying and adorning the city. More than 100 buildings, mostly of a spacious and costly character, are being erected. Five railroads concentrate at this point. About 700 bales of cotton have arrived daily at this place during the current month.

The various railroad companies connecting with this city are pushing their operations ahead with vigor. It is thought that 500 miles of railroads will be in operation in Texas by the 1st of January, 1861.

JOURNAL OF MINING, MANUFACTURES, AND ART.

QUARTZ MILLS OF THE ROCKY MOUNTAINS.

The mode of working quartz mills is thus described by a correspondent of the *World*:—

In the hills around Mountain City, a gold-bearing quartz rock is found in streaks or veins. It is obtained by a tunneling process. On the side of the mountains the blossom rock is seen, which indicates a vein of quartz. The miners then commence a tunnel into the hill following the course of the vein. In the quartz the gold exists in very fine particles—an impalpable powder, and to separate it the rock must likewise be reduced to the same state, which is done by pounding or grinding, the first by the use of Gate's stamp crusher, the last by Ellithorpe's grinder. The former is the most simple process, consequently popular with the miners, and the Gate's mills are more numerous, ten to one, in this neighborhood, than the Ellithorpe.

The mills are of different sizes, some having six stamps, while others have twenty-four. The most common is the six, a great many having twelve and fifteen stamps, all driven by either steam or water power. A twenty-horse power engine will drive a twenty-four stamp mill; the average is about a horse-power to one stamp.

The stamps vary in weight from two hundred to seven hundred pounds each. The experience of our mill-men teaches that a four hundred stamp is heavy enough for all practical purposes; the stamps that are heavier smash up the machinery, and are used to the serious detriment of the proprietors thereof; therefore, the best size to bring out is stamps of four hundred pounds. These stamps are round, and about six inches in diameter, their length depending upon the weight desired. Fourteen inches is considered the most convenient length. These are firmly attached to a bar of iron three inches in diameter and eight feet long, called the stems.

The stems and collar serve as a handle to the stamps, by which they are lifted up; half the length of the stems, an iron collar is fitted, flat on the underside. These stems and stamps are fitted into a wooden frame, which stands perpendicular, through which they work up and down.

A box made of iron or wood, very strong, and placed upon a solid foundation, about three feet long and one foot wide, open at one side, which is made of a net work, or perforated sheet-iron, open at the top. The two ends and front side are tight, which are about twenty inches high; this is the mortar, or battery, into which the rock is placed, and two or three stamps fall into it; a twenty-four stamper has eight of these batteries.

Back of the stems, near the collar, there is a heavy shaft, horizontal across the frame, to which are attached arms called cams, about twenty inches long, of a serpentine shape. When the stamps are down, the collar is near the shaft or foot of the cams. As the shaft revolves, the cams lift the stems by the collar until they slip over the end and fall into the battery. As it moves up over the cams, the friction gives a rotary motion to the stamps, which prevents them falling in the same place, and wearing off more on one side than the other.

On the back of the battery, below it, is a wooden platform, called an apron, three feet wide, and of various lengths. At the top, a plate of sheet-copper, quicksilvered, is attached, the whole width of the apron, and about two feet of its length; below this, the platform is cut into grooves, across it. Often slats are put in the same as slats to a window blind, opening towards the battery, on an angle of about sixty degrees. The crevices thus made are filled with quicksilver. This platform is stationary.

At the end of the apron, and below it, is a box, three feet wide at the upper end, and six inches high, which decreases in width until it is about twenty inches

wide. The bottom of this sluice is covered with quicksilvered copper sheeting. Below this joint of sluice there are others, extending sometimes fifty feet—the longer the better—twenty inches wide, and the sides six inches high, the bottom of which is covered either with copper prepared with quicksilver, or ripple bars across the bottom. Frequently perforated sheet-iron is placed, and often a woolen blanket. At the end of the sluices a barrel is sunk below it, or a box of quicksilver is placed.

From the front side the quartz is shoveled in, and a stream of warm water, about six quarts per minute, is discharged into the battery. The stamps go up and down, each one making thirty strokes per minute; the quartz is pounded into powder; a teaspoonfull of quicksilver is put into the battery every half hour; the warm water makes the silver active; the splashing of the water by the fall of the stamps keeps the whole mass in constant agitation. A portion of the fine gold comes in contact with the silver, and becomes amalgamated with it. As the quartz becomes powdered it is splashed through the net-work on to the apron, where a portion of the gold dust, that has not become amalgamated in the battery, comes in contact with the copper sheeting, and is fastened to it. The water, fine quartz, and gold dust pass over the sheet copper, and a portion of the gold comes in contact with the quicksilver in the crevices, where it is likewise held fast; if it passes over that, it falls into the sluice, where other copper sheeting, prepared in the same way as on the apron, gathers a portion; the ripple bars below do the same, also the blanket, and as a last resort the mass falls into the barrel or box at the end; the water passes off, and the fine quartz, or trailings, as it is called, is retained, from which it is thrown out on the bank, the gold settling at the bottom.

I have never seen quartz ground fine enough yet to secure all the gold, and these trailings must contain at least forty per cent of its original amount of dust. The gold is so fine that it will not sink as readily as one would wish; it floats on the surface like gold leaf. If the ore is coarse, in nuggets, it is easily retained by the use of ripple bars, of simple construction; but when it is as fine as the ashes of roses, it is a very difficult matter; and an invention that would secure the entire amount of gold from the quartz would be invaluable.

I am informed by Mr. B. M. SHERMAN, recently from your city, where he is well known to the denizens of Wall-street, that a gentleman there, of the highest scientific and mechanical attainments, has invented an instrument, or a process, by which the above-named object is attained. If so, our miners are very desirous to have the same put to the test, and if successful the inventor's fortune is made. To this country alone such an invention would be worth millions of dollars.

Generally once a week the quartz mills are stopped for the purpose of cleaning up. The amalgam, quicksilver and gold, are taken from the battery, scraped from the copper plates, drawn from the crevices and ripple bars, taken from the blanket and sluice after the perforated iron sheeting is removed; also what remains in the box or barrel at the end of the sluice; the whole mass is put into pans containing warm water, where it is washed clean of the sand or fine quartz,

abandoned by our mill-men, and the process of retaining the gold as described above depended upon.

Great care should be taken in the construction of quartz mills. The manufacturer should make them as simple as possible, avoiding complicity as much as he can. A simple trip-hammer is preferable for crushing quartz to a card machine in a cotton mill; as few cog-wheels and fancy contrivances in crushing the quartz is desirable, reserving the theory and delicate machinery for the separation of the gold from the quartz after being crushed.

The Ellithorpe mill is constructed to grind the quartz into powder between the teeth of several wheels, like a corn and cob crusher—the first pair breaking the quartz into pieces the size of an egg; the second smaller, and so on, until the last pair reduces it to powder, when it is subjected to the same process as that of the other mills described above. These mills have not been put into operation much yet. All are waiting for the completion of a ditch, which is to furnish an abundant supply of water.

One thing about the boiler. To manufacture steam the locomotive boiler is objectionable, for the reason that the flues are so small, and the fuel being pine fills them up with soot, and it is with great difficulty and loss of time that they are cleaned.

The double flued boiler with stationary engine is far more preferable, and gives greater satisfaction to the proprietors. The engine should stand by itself, and not over the boiler, nor resting upon it.

The advantage of warm water over cold in the batteries is generally conceded, and the usual way of warming the water is by using the waste steam, which passes into the tank, and coming in contact with a large body of water is soon condensed, and has but little effect.

The best contrivance, and the cheapest, is to construct a small tank, three feet square and four feet high; within six inches of the top put in a false bottom of sheet-iron or wood, perforated with small holes; on to this draw the water, in a sufficient amount to supply the battery, (a gallon and a half a minute,) and as it rains through into the box, every drop comes in contact with the exhaust steam from below, and is speedily heated.

SILK-WEAVING.

This branch of manufacture has hitherto received less assistance from machinery than any other. In plain silk-weaving the process is much the same as in the weaving of woollen and cotton; but in France, and elsewhere, the weaver is assisted only by a machine for the even distribution of the warp, which consists sometimes of as many as eight thousand separate threads in a breadth of half a yard or twenty inches. What is called the Jacquard loom, invented by a weaver of Lyons, has been employed for many years, and has been the means of facilitating and cheapening the production of fancy or figured silks, to an extraordinary extent. Patterns which required the greatest degree of skill, as well as the most painful labor, are produced by this machine by weavers of ordinary skill, and with but little more labor than that required in weaving plain silks. Although this is not a power loom, and is designed as an assistant to hand-

cepting for the commonest goods, it does not possess any great advantage over the hand-loom, as the delicacy of the material to be worked, and the attention which must be given to the process of the weft, frequently render it necessary to stop the machine.

The employment of silk-weaving by hand-loom is said to be very injurious to health. This is indicated by the great mortality which prevails among the weavers at Lyons, where there are probably, within the city and immediate neighborhood, from thirty to forty thousand hand-loom. None but those of the most robust and healthy organization can resist the peculiar strain upon the constitution which is incident to this system of work.

An invention, by a citizen of Lyons, has recently been made public, which is called automatic-weaving. It is a combination of steam or water-power with hand-weaving, which, for economy of expense, increase of produce, and salubrity of labor, is said to be very satisfactory in its results. The mechanism enables the weak and infirm, and even the crippled invalid, to earn a livelihood at the loom. The invention is calculated to benefit both employer and workman; but at Lyons, where the silk-weavers exist in a condition of practical slavery, and where, to a great extent, the workman is held as of less importance than the work, it is anticipated that much opposition will be manifested to its introduction.

DIFFERENCE BETWEEN A WATCH AND A CLOCK.

A watch differs from a clock in its having a vibrating wheel instead of a vibrating pendulum; and, as in a clock, gravity is always pulling the pendulum down to the bottom of its arc, which is its natural place of rest, but does not fix it there, because the momentum acquired during its fall from one side carries it up to an equal height on the other—so in a watch a spring, generally spiral, surrounding the axis of the balance-wheel, is always pulling this towards a middle position of rest, but does not fix it there, because the momentum acquired during its approach to the middle position from either side carries it just as far past on the other side, and the spring has to begin its work again. The balance wheel, at each vibration, allows one tooth of the adjoining wheel to pass, as the pendulum does in a clock, and the record of the beats is preserved by the wheel which follows. A main spring is used to keep up the motion of the watch, instead of the weight used in a clock; and as the spring acts equally well whatever be its position, a watch keeps time although carried in the pocket, or in a moving ship. In winding up a watch, one turn of the axle on which the key is fixed is rendered equivalent, by the train of wheels, to about four hundred turns or beats of the balance-wheel; and thus the exertion during a few seconds of the hand which winds up, gives motion for twenty-four or thirty hours.

TO COAT IRON NAILS WITH TIN.

Take the nails which are to be operated upon, and place them in a stoneware dish, containing 1 part (by measure) of sulphuric acid and 8 parts of water. Agitate them in this until the oxyd is removed from their surfaces; then pour off the acidulous liquor, and wash them well in plenty of hot soft water. Now place them in the stoneware vessel, and pour in a dilute solution of tin dissolved in muriatic acid, sufficient to cover them. The vessel is then slightly inclined

until all the nails lie together at one side. When this is effected, immerse a small strip of copper at a short distance apart, and connect this with the nails by a copper wire. In a very short period of time the nails will be covered with a deposit of tin, when they may be removed, washed and dried. The nibs of steel pens may be coated with tin in the same manner. By dipping cleaned iron nails in molten tin, they will also receive a covering of this metal.

RISE AND PROGRESS OF THE MARQUETTE IRON TRADE.

A Marquette, (Mich.,) paper gives the following account of the iron trade of that section:—Clouds and darkness rest upon the early history of the Marquette iron trade. Previous to 1857, scarcely a trace of it can be found. And, indeed previous to that year, there was but little of system in it, operations were desultory, and results small. But, from that time, the business has been systematized, and prosecuted with vigor from year to year, until it has grown to its present proportions. The following table will exhibit the increase of product from the epoch above mentioned, down to the present time:—

IRON ORE.

Product of iron ore in 1857.....	tons	27,000
“ “ 1858.....		80,327
“ “ 1859.....		80,000
“ “ 1860.....		150,000
Total in the four years.....		287,327

And next year's increase will be fully equal to that of the last.

PIG IRON.

Product of pig iron in 1858.....	tons	2,000
“ “ 1859.....		6,000
“ “ 1860.....		5,000
Total in the three years.....		13,000

CASTINGS.

Our two foundries have been in operation a little over two years, and their product is as follows, or very near it:—

Product of Marquette foundry.....	tons	2,000
Product of Lake Superior foundry.....		1,500
Total.....		3,500

There were also 300 tons of blooms shipped in 1857, and how much previously we do not know. That branch of the manufacture, however, has been abandoned.

It will be seen that the product of pig iron has fallen off the last year. That has been owing to temporary causes, considerable time having been taken up in repairs, and in introducing improvements with a view to increased product in future years. The prospect now is, that next year's product will reach 10,000 tons, if not a higher figure. But two stacks have been in blast at all the past year, except the three or four weeks' run of the new furnace at the Chocolate, whereas next year there will be four at least in blast, and five, if both stacks of the Pioneer Company are fired up; and the new impulse given to the iron trade will be likely to bring all the available facilities of production into requisition.

The blast furnace at Wyandotte last year, with only eight feet *bosh*, turned out thirty-five hundred tons of pig. At the same ratio of production, our five furnaces, should they all be in operation, ought to turn out fifteen to twenty thousand tons, worth, say \$400,000.

The aggregate amount of ore brought down by the Marquette and Bay de Noc Railroad the present season for the different iron companies, is as follows, viz. :—

Jackson Company.....	tons	62,980
Cleveland Company.....		47,889
Lake Superior Company.....		39,394
Total		150,263
Pig iron for Pioneer Iron Company.....	tons	3,050
“ for S. R. Gay		933
“ for S. R. Gay by teams.....		867
Northern Iron Company		150
Total		5,000

This may be called a great season's business, when it is considered that there was some interruption in the spring by delay in opening the canal, and still more in the fall by reason of the withdrawal of the sail vessels, and of the repairs upon the road. The Pioneer works too have lost considerable time in repairs and making improvements. The aggregate avails foot up as follows:—

132,000 tons iron ore, gross weight	\$396,000
5,000 tons pig iron.....	125,000
	\$521,000

This will give quite a handsome profit to the iron companies.

Let us see, quarrying the ore at 50 cents a ton, would amount to...	\$75,000
Railroad charges, one dollar a ton.....	150,000
Total	\$225,000
Net profit	171,000

An amount which would pay a good round interest on a pretty big pile of capital.

COALS IN RUSSIA.

The consumption of coals in Russia has risen very rapidly since the last war. In 1857, the quantity imported into St. Petersburg was 142,000 tons, while, in 1858, the quantity shipped to the same port was 270,000 tons, giving an increase of 128,000 tons in that city alone. There is considerable demand for them for use in steamboats, manufactories, and, to a certain extent, in railways; they are also used in workshops and factories. Hitherto it has been considered more economical and less injurious to the machinery to use wood, but the supply of wood not being equal to the demand, and railways extending so rapidly in Russia, the use of coal there is likely greatly to increase. The mines in the Ural Mountains will probably reduce the demand a little when they get into proper working order, and railways are opened out that far East; but that will not be for some years to come. The Russian government uses annually in St. Petersburg 35,000 tons, the price for steam purposes being about 24s. per ton; for house purposes, about 30s. per ton delivered.

STATISTICS OF AGRICULTURE, &c.

STATISTICS OF MINNESOTA.

In February, 1860, the office of "Commissioner of Statistics of Minnesota" was created, and the Commissioner has made a report on various departments. In relation to agriculture, he reports that it was ascertained, from the official returns by counties, that in 1859 the—

Whole number of acres cultivated was.....	454,200
Number of farms.....	21,600
Average number of acres tilled in each farm.....	21

PRODUCTS.

	Acres.	Bush. harvested.	Av. yield.
Wheat.....	164,955	3,288,900	20
Corn.....	132,066	3,130,500	23
Oats.....	104,800	3,420,000	34
Potatoes.....	17,000	2,228,300	125

This exhibit the Commissioner justly regards as a very creditable one for a State so new as Minnesota, and it cannot be wondered that he should make the following comparison between the—

COMPARATIVE YIELD OF STATES.

	Bush. to 1 inhab't.		Bush. to 1 inhab't.
Minnesota, 1859.....	18½	Wisconsin, 1849.....	14
Ohio, 1859, (greatest known yield)	17	Illinois, 1849.....	11
Ohio, average yield for 9 years..	8	Iowa, 1849.....	3
Michigan, 1848, (greatest yield)..	23½	" 1856.....	9
Michigan, 1849.....	12½	" 1859.....	8½

A comparison of actual quantities shows that Minnesota raised in 1859, in what may be called the fourth year of her agricultural existence, with a population of 175,000, more than fifty per cent more wheat than was raised in Iowa, with a population of 633,449, and more than one-fourth the wheat crop of Ohio, as estimated by the Commissioner of Statistics of that State.

He assumes the following to be the—

COMPARATIVE WHEAT CROP OF 1859.

	Population.	No. of bush.		Population.	No. of bush.
Minnesota.....	175,000	3,288,900	Ohio.....	2,500,000	12,000,000
Iowa.....	633,449	2,105,608	Wisconsin, 1850	304,756	4,286,131

The average crop of wheat in Minnesota is fixed at twenty bushels, but Mr. WHEELLOCK says that if the local estimates were taken as received the yield would have to be called twenty-three bushels per acre. But, says the Commissioner, experience has taught us to allow largely for the disposition to base general inferences on the most striking and notorious instances, and for the general habit of confounding a *usual* result with an *average* one.

In regard to the surplus left in Minnesota last fall after the close of navigation, the Commissioner says that five or six bushels of wheat per capita is the rule of consumption. It is estimated that each horse will consume sixty bushels of oats, the number of horses on the basis of Wisconsin being about

18,000. The surplus of wheat and oats remaining over for the spring trade would, therefore, be as follows:—

	Wheat.	Oats.
Whole crop of 1859	8,288,900	3,420,000
Fall export, 1859.....	369,625	.....
Reserved for consumption.....	1,000,000	.....
Reserved for seed.....	500,000—1,869,625	1,500,000
Remaining for spring shipment.....	1,419,275	1,920,000

Returns subsequently obtained from the different transportation lines and other sources, proved this estimate to be nearly correct. The Commissioner draws a strong picture of the—

PROGRESS OF AGRICULTURE IN MINNESOTA.

The Territory was organized in 1849, when most of the population of 6,000 souls were attached to the Indian trade. The national census of 1850, gave the following results:—

	Wheat.	Corn.	Oats.
1849	1,401	16,725	80,582
1859	3,288,000	8,130,000	3,420,000

The real agricultural history of the State did not commence, however, until 1854, when the Sioux were finally removed, so that a fair comparison would be the following:—

	Acres tilled.	Wheat.	Corn.	Oats.
1854.....	15,000	7,000	83,600	153,000
1859.....	454,000	3,288,000	8,130,000	3,420,000

Thus in five years from the actual commencement of her agricultural growth, Minnesota has produced a surplus of over 5,000,000 bushels of grain, and in the meanwhile has fed a population which has increased from 35,000 to 175,000.

The copy of Mr. WHEELLOCK's report which came to our notice was one of the second edition, and published so recently that the Commissioner was enabled to insert the following general estimate of the crop of 1860. His personal observation and the official returns recently received, convince him—

1. That the tilled breadth of 1860 is one-third larger than 1859.
2. That the breadth of wheat sown was nearly doubled. This increase was very considerable in the Southeastern counties, but in the Western and Northern sections of the State the area is three or four times as great, and more than half of the whole tilled breadth of the State was in wheat.
3. There was a large increase in the average yield per acre, variously estimated at from 15 to 30 per cent.
4. This fruitfulness extends to all crops, including corn, oats, potatoes, and hay.
5. The head of grain is better filled, and the grain better developed than last year.
6. The wheat crop has not met a single check, nor suffered from the depredations of a single insect, so far as ascertained.
7. The breadth of corn and oats planted is much less than last year, but if the corn is harvested without accident, the aggregate will be more than half that of last year.
8. The wheat crop of Minnesota in 1860, with a yield of 23 bushels per acre, will reach an aggregate of over 6,000,000 bushels, of which 4,500,000 will be surplus; and that this is by 50 per cent the largest recorded crop of wheat, in

proportion to the population, ever previously produced in any State of the Union, being more than half the whole crop of Ohio in 1859, and equal to 35 bushels of wheat to every individual in the State. The foregoing calculations are made upon an assured basis of fact, without reference to current opinions upon the subject.

ACTUAL YIELD OF CROPS PER ACRE.

Any one much acquainted with farmers must be aware of their general disposition to overestimate their crops; but we suspect that those most familiar with this trait of human nature will be surprised at the actual yield of the leading staples in the fertile State of Ohio, as shown by the following statistics from the office of the Auditor of the State, which we find in a recent number of the *State Journal*:—

WHEAT.—Number of acres sown, 1,790,627; bushels produced, 13,345,844; average per acre, $7\frac{1}{2}$ bushels.

CORN.—Acres sown, 2,339,204; bushels produced, 69,372,343; average per acre, 30 bushels.

OATS.—Acres sown, 644,954; bushels produced, 15,055,059; average per acre, $23\frac{1}{2}$ bushels.

RYE.—Acres sown, 98,011; bushels produced, 561,065; average per acre, $5\frac{1}{2}$ bushels.

BARLEY.—Acres sown, 102,729; bushels produced, 1,639,388; average per acre, 16 bushels.

BUCKWHEAT.—Acres sown, 149,645; bushels produced, 2,222,083; average per acre, 15 bushels.

MEADOW.—Acres, 1,340,566; tons of hay produced, 1,365,888; average per acre, 1 ton.

WHEAT CROP.—Smallest average per acre: Trumbull County, $\frac{1}{2}$ bushel; Mahoning, $\frac{1}{2}$ bushel; Columbiana, 1 bushel; Stark, 1 bushel. Largest average per acre: Ottawa County, 17 bushels; Erie, 16 bushels; Sandusky, 16 bushels; Lucas, 16 bushels. Smallest crop in one county: Trumbull, 2,084 bushels; Mahoning, 6,510; Portage, 10,373 bushels; Geauga, 11,078 bushels. Largest crop in one county: Butler, 589,076 bushels; Seneca, 502,500 bushels; Montgomery, 461,214; Highland, 399,005 bushels.

THE SUGAR REGION OF LOUISIANA.

We give, says the *Charleston News*, an interesting extract from a letter, by a gentleman of letters and education, who has been making a brief visit to one of the richest sugar regions in Louisiana, which may help our readers to some additional statistics of the Southwest:—

I have been looking, for a season, over that beautiful portion of the sugar region of Louisiana, known abroad, generally, as the *Grasse Tele*—taking its name from a stream connecting the Mississippi River with the gulf, and which Mr. LONGFELLOW has immortalized in his beautiful poem of *Evangeline*, under the name of *Plaquemine*. I have a friend who possesses a sugar estate on its now classic banks; and it is such a beautiful and attractive region that I have resolved to spend a portion of the summer with him, amid its genial influences. Here you meet daily the identical colony of *Acadians* which the poet represents as emigrating from Canada, and taking up their abode under our gleaming Southern suns. These people all speak the French language still; live to themselves; and have little intercourse with the world, contenting themselves with the satisfaction of a few simple wants; cultivating, with their own hands, their humble acres; rearing a few cattle, and, occasionally, manufacturing a few bar-

rels and hogsheads for the wealthy planters. They are a strange, clannish people, resembling much, in appearance and habits, the race of Gipsies. They are *electors*; and, it is said, always act with *the party* which is most lavish of its bribes. I am sure, if Mr. LONGFELLOW had ever seen this Acadian colony before composing his *Evangeline*, he would have despaired of ever investing them with any of the charms of poetry; and even in Canada they were probably the same people in habits as now.

The sugar planters here are all wealthy; small capitalists being unable to conduct such expensive establishments. They (the planters—not the Acadians) make, yearly, from 300 to 1,800 hogsheads of sugar, weighing, each, 1,200 pounds, at an average price of six cents per pound. The molasses defrays the current plantation expenses. The smallest *force* on any one plantation is never below fifty effective hands, nor ever above eighty. Mr. LAPICE, a South Carolinian by birth, is the largest planter in the State, making, annually, over 2,000 hogsheads. The largest sugar crop ever made was that of 1837, which reached 500,000 hogsheads; but the average crop is about 300,000. Sugar planting is a much more profitable investment than cotton. When properly conducted, it yields a premium of about 20 per cent on the investment. Cotton, rarely over 10, even in the most favorable latitudes and on the best soils.

CULTIVATION OF GRAPE IN SONOMA VALLEY.

We have been favored, says the *California Farmer*, with a valuable history of the progress made in the planting of vineyards and in wine-making in Sonoma Valley, which we know will be of interest to all who have at heart the real welfare of our State.

The vineyards of California, with the presses running over with “new wine,” are emblematic of the continuous flood of wealth which is to be derived from this source. The wine, wool, and grain will soon become the great triple chain that will strengthen and bind together the different counties and their interests, and make our State distinguished for those immense products, each of which will count in *millions of dollars annually*!

The number of grape vines planted in Sonoma Valley is 789,500. The number of foreign vines planted by each individual is as follows:—Colonel A. HARASZTHY, 600 in bearing, 4,000 two years old, 4,000 one year old, 20,000 planted last winter. General M. G. VALLEJO, 1,000 two years old, 2,000 one year old. L. H. S. WILLIAMS, 720 two years old, 4,760 one year old. W. HOOD, 1,000 one year old, 1,000 planted last winter. W. SHAW, 4,000 one year old, 5,000 planted last winter. JOHN SWETT, 6,000 planted last winter. The remainder are native vines.

WINE AND BRANDY MADE.—The number of gallons of wine and brandy made by each individual is as follows:—Colonel A. HARASZTHY, 12,000 in 1858, 10,800 in 1859; General M. G. VALLEJO, 4,000 in 1858, 6,000 in 1859. Of brandy, Colonel HARASZTHY made 260 gallons in 1858, and 300 in 1859; all that is reported.

AVERAGE OF GRAPES TO THE VINE.—The average number of pounds of grapes to the vine, produced by each individual, is as follows:—Colonel HARASZTHY, 25; M. G. VALLEJO, 25; KROHN & WILLIAMS, 20; G. P. SWIFT, 20; F. SEARS, 10; LEWIS ADLER, 25; N. CARRIGER, 20; Mrs. M. P. HILL, 20; O'BRIEN, 20; G. E. WATRISS, 10; MULIN & GRENN, 20; O. C. CRAIG, 15; Mrs. HARRIS, 15; Judge BRIGHT, 15; H. BROOKMAN, 15; WM. BOGGS, 20; G. T. POULI, 15.

HOP CROP OF EUROPE AND AMERICA.

The following returns of the hop crop is given by a New York house in the trade, with the remark that in presenting the following comparative statement of the hop crop of Europe and America, I would respectfully solicit a careful and considerate attention to the same, and would simply remark, by way of introduction, that, while *estimates* must always be merely *approximations* to actual facts, I have endeavored scrupulously to avoid all extremes, preferring to err, if at all, on the conservative side :—

COMPARATIVE STATEMENT.

	Average crop.	Estimate for 1860.
Bohemia.....bales	40,000	6,500
Belgium.....	75,000	18,500
France.....	10,000	5,000
Brunswick.....	5,000	2,500
Bavaria.....	100,000	25,000
Poland.....	7,000	3,500
Great Britain.....	250,000	30,000
Total.....	487,000	91,000
Stock of old hops in Great Britain.....	180,000	.....
Less one-third to be equal to new.....	60,000	120,000
Total supply in Europe.....	.....	211,000
Annual consumption in Great Britain.....	200,000	.....
Annual consumption on the continent.....	250,000	450,000
Apparent deficit in supply as compared with consumption of Europe...	.....	289,000
Estimated crop of American hops this year.....	.....	60,000
Stock of old hops in America.....	25,000	.....
Less one-third to be equal to new.....	8,333	16,667
Total supply in America.....	.....	76,667
Annual consumption in America.....	.....	55,000
Surplus of American hops.....	.....	21,667

This surplus has already been almost disposed of, the exports and engagements to Europe to date having been about 5,000 bales of old hops, and about 15,000 bales of new. The old hops in America are chiefly composed of the growth of 1855-6-7, the consumption for the past two years having been about on a par with the production in England, from all I can learn, the stock of old hops consists also of the surplus growth of the years named, the large crop there last year having been required to make up the deficiency which occurred in Germany.

The tendency of prices in our market is decidedly upward, and it is now difficult to make purchases at the annexed quotations:—1855-6-7, 10 a 14 cents per pound; 1858 and 1859, 16 a 22; and 1860, 30 a 37. The outside price for new hops is for a strictly prime quality, which is always a comparatively scarce article; but it is well to remark that the quality of our crop this year is in general most excellent, very few of really inferior quality having yet come forward.

STATISTICS OF POPULATION, &c.

POPULATION OF WISCONSIN.

The following table shows the progress of population in the State of Wisconsin during the last twenty years. We have prepared the table by counties in their numerical order, and it exhibits the singular characteristic of the southern counties being densely populated, while the population of the northern counties is scattered and sparse; but the railroads in progress of construction in that section will carry immigration with them:—

	1840.	1850.	1860.		1840.	1850.	1860.
Milwaukee....	5,605	31,077	62,337	Monroe.....	....	....	8,417
Dane	314	16,639	43,412	Marquette....	18	8,641	8,236
Rock	1,701	20,760	37,583	Crawford.....	1,502	2,498	8,071
Jefferson	914	15,317	37,450	Calumet.....	275	1,743	7,907
Dodge	67	19,138	36,086	Portage	1,623	1,250	7,538
Fond du Lac..	139	14,510	34,202	Adams.....	....	187	7,004
Grant.....	2,926	16,169	31,175	Keewaunee....	....	....	5,532
Waukesha....	....	19,258	26,828	Pierce .....	....	....	4,677
Sheboygan...	133	8,379	26,725	Jackson .....	....	....	4,134
Walworth....	2,611	17,862	26,523	Oconto.....	....	....	3,591
Columbia .....	....	9,564	24,554	Eau Claire....	....	....	3,212
Winnebago ...	135	10,167	23,788	Door.....	....	....	2,987
Washington...	343	19,485	23,628	Marathon.....	....	508	2,893
Manitowoc....	235	3,702	22,405	Wood.....	....	....	2,425
Racine	3,475	14,973	21,411	Chippewa.....	....	615	1,894
Greene.....	933	8,566	19,866	Shawana.....	....	....	829
Iowa.....	3,978	9,525	19,323	Clark.....	....	....	793
Sauk.....	102	4,371	18,971	St. Croix ...	809	624	6,820
Lafayette....	....	11,531	18,324	Polk.....			
Ozaukee.....	....	....	15,801	Dallas			
Kenosha.....	....	10,734	13,864	Burnett.....	....	....	6,430
Green Lake...	....	....	12,670	Buffalo.....			
La Crosse....	....	....	12,136	Trempeleau..			
Brown	2,107	6,215	11,800	Dunn.....	....	....	4,985
Bad Ax.....	....	....	11,012	Pepin.....	....	....	....
Richland .....	....	903	9,720	Douglas ...	....	489	1,691
Outagamie...	....	....	9,602	Ashland....			
Waupacca....	....	....	8,919	La Pointe...			
Waushara....	....	....	8,815				
Juneau.....	....	....	8,774	Total	30,945	305,391	777,771

POPULATION OF MASSACHUSETTS.

The following table shows the population of Massachusetts for 1860, as taken by the United States Marshals, compared with the returns for 1840 and 1850, exhibiting a progressive increase quite satisfactory:—

	1840.	1850.	1860.		1840.	1850.	1860.
Middlesex..	106,611	161,383	216,434	Berkshire .	41,745	49,591	55,138
Suffolk....	95,773	144,517	192,762	Hampshire..	30,897	35,732	37,877
Essex.....	94,987	131,300	165,635	Barnstable.	32,543	35,276	36,010
Worcester..	95,313	130,789	159,644	Franklin ..	28,812	30,870	31,499
Norfolk ...	53,140	78,892	108,065	Nantucket..	9,012	8,452	6,097
Bristol....	60,164	76,192	93,811	Dukes	3,953	4,540	4,401
Plymouth .	47,373	55,697	66,734				
Hampden .	37,366	51,283	57,392	Total....	737,699	994,514	1,231,497

The following table gives the population of some of the principal cities and towns for 1860 :—

Boston.....	177,902	Fall River.....	14,026	Waltham.....	6,397
Lowell.....	86,848	Gloucester.....	10,904	Dedham.....	6,332
Cambridge.....	26,074	Dorchester.....	9,769	West Roxbury..	6,311
Roxbury.....	25,137	Newton.....	8,385	Woburn.....	6,287
Charlestown....	25,075	Somerville.....	8,025	Marlborough....	5,911
New Bedford....	22,309	Weymouth.....	7,742	Malden.....	5,886
Salem.....	22,256	Adams.....	6,926	Brookline.....	5,764
Lynn.....	19,108	Quincy.....	6,778	Randolph.....	5,763
Taunton.....	15,880	South Danvers..	6,549	Barnstable.....	5,132
Springfield.....	15,200				

CENSUS OF CINCINNATI.

Mr. C. S. WILLIAMS has completed his census of Cincinnati, as authorized by the City Council, and his report, as given below, was submitted to that body by the Mayor, and approved. It increases the population over that taken by authority of the general government about 10,000 :—

Wards.	White males.		White females.		Col'd males.		Col'd fo.		Total.
	Under 21 y'rs.	21 y'rs. and up.	Under 21 y'rs.	21 y'rs. and up.	Under 21 y'rs.	21 y'rs. and up.	Under 21 y'rs.	21 y'rs. and up.	
First.....	1,840	2,166	2,048	2,068	85	110	114	132	8,563
Second.....	923	2,097	947	1,018	47	42	64	48	5,185
Third.....	1,888	2,945	1,997	1,905	14	11	14	17	8,791
Fourth.....	1,712	2,308	1,763	1,707	96	111	128	162	7,977
Fifth.....	1,300	1,884	1,540	1,611	48	35	33	43	6,494
Sixth.....	1,804	2,042	2,014	1,969	67	64	88	95	8,143
Seventh.....	1,980	2,041	1,972	1,895	48	31	48	40	8,050
Eighth.....	3,290	3,460	3,659	3,462	13	12	16	18	13,930
Ninth.....	2,308	2,675	2,284	2,354	9	16	10	13	9,669
Tenth.....	2,815	3,036	2,910	2,742	13	9	11	13	11,549
Eleventh.....	3,908	3,776	3,842	3,557	6	4	8	6	15,107
Twelfth.....	4,992	5,038	5,078	4,680	16	14	18	18	19,844
Thirteenth.....	1,641	1,715	1,637	1,615	258	257	296	317	7,736
Fourteenth.....	1,853	2,649	2,194	2,502	45	40	66	76	9,425
Fifteenth.....	2,726	2,852	3,272	3,350	94	56	84	103	12,537
Sixteenth.....	2,782	2,797	3,012	2,620	28	18	27	23	11,307
Seventeenth.....	1,024	997	1,086	956	..	1	..	..	4,069
Public Institutes...	227	332	77	278	1	7	..	4	926
River and Canal...	12	1,862	7	19	..	81	..	15	1,996

Total of the Wards..... 171,293

POPULATION OF VICTORIA.

Quarterly abstract showing the population of Victoria on the 31st March, 1860 :—

	Males.	Females.	Persons.
Population on the 31st December, 1859.....	335,558	194,376	529,933
Increase by excess of immigration over emigration (by sea) during the quarter ending 31st March, 1860.....	997	1,174	2,171
Increase by births over deaths during the quarter ending 31st March, 1860.....	658	1,243	1,901
Total.....	337,213	196,792	534,005
Increase during the quarter.....	1,655	2,417	4,072

POPULATION OF INDIANA.

The complete census of the State of Indiana is now published by the Marshal. The result shows a gratifying increase in the population of this prosperous State. We have compiled the following table from official sources, having arranged the counties in their numerical order in the census of 1860, so as to show at a glance the concentration of population around those cities and towns which have become the receiving and distributing points for the produce of her fertile valleys, such as Indianapolis in Marion County; Richmond in Wayne; Fort Wayne in Allen; Terre Haute in Vigo; New Albany in Floyd; Evansville in Vanderberg, &c. :—

	1840.	1850.	1860.		1840.	1850.	1860.
Marion.....	16,080	24,103	40,861	Howard.....	....	6,657	14,626
Wayne.....	23,290	25,320	29,617	Clinton.....	7,508	11,869	14,468
Allen.....	5,942	16,919	29,326	Gibson.....	8,977	10,771	14,457
Tippecanoe...	13,724	19,377	25,758	Noble.....	2,702	7,946	14,387
Jefferson.....	16,614	23,916	25,044	Owen.....	8,559	12,106	14,503
Dearborn.....	19,327	20,166	24,467	De Kalb.....	1,968	8,251	13,895
Vigo.....	12,076	15,289	23,527	Carroll.....	7,819	11,015	13,649
Laporte.....	8,184	12,145	23,047	Daviess.....	6,720	10,852	13,436
Elkhart.....	6,660	12,690	20,996	Warrick.....	6,321	8,811	13,295
Montgomery...	14,438	18,084	20,922	Spencer.....	6,805	8,616	13,027
Putnam.....	16,843	18,615	20,729	Switzerland...	9,920	12,932	12,884
Vanderberg...	6,250	11,414	20,627	Monroe.....	10,143	11,286	12,809
Clark.....	14,595	15,328	20,465	Hancock.....	7,535	9,698	12,751
Henry.....	15,128	17,605	20,259	Marshall.....	1,651	5,348	12,724
Floyd.....	9,454	14,875	20,090	Clay.....	5,567	7,944	12,174
Franklin.....	13,349	17,968	19,670	Orange.....	9,602	10,909	12,000
Shelby.....	12,005	15,602	19,578	Perry.....	4,655	7,268	11,857
Ripley.....	10,392	14,820	19,119	Lagrange.....	3,664	8,887	11,858
Randolph.....	10,684	14,725	19,016	Jay.....	3,863	7,047	11,182
Harrison.....	12,459	15,236	18,557	Wells.....	1,822	6,152	10,887
St. Joseph.....	6,425	10,964	18,454	Whitley.....	1,237	5,190	10,751
Kosciusko.....	4,170	10,243	18,027	Dubois.....	3,632	6,321	10,486
Washington...	15,269	17,040	17,903	Steuben.....	2,578	6,104	10,474
Bartholomew...	10,042	13,428	17,787	Porter.....	2,162	5,234	10,302
Wabash.....	2,756	12,138	17,526	Pike.....	4,769	7,720	10,188
Hamilton.....	9,855	12,684	17,310	Warren.....	5,656	7,387	10,074
Decatur.....	12,171	15,107	17,211	Lake.....	1,468	3,991	10,000
Hendricks.....	11,264	14,683	17,004	Fayette.....	9,837	10,217	9,882
Miami.....	3,048	11,304	16,861	Fulton.....	1,993	5,982	9,427
Cass.....	5,480	11,021	16,829	Adams.....	2,264	5,797	9,252
Boone.....	8,121	11,631	16,821	Martin.....	3,875	5,941	8,975
Madison.....	8,874	12,375	16,574	White.....	1,832	4,761	8,501
Jackson.....	8,961	11,047	16,442	Crawford.....	5,282	6,524	8,330
Rush.....	16,456	16,445	16,201	Tipton.....	....	3,532	8,192
Posey.....	9,683	12,549	16,185	Scott.....	4,242	5,835	7,338
Grant.....	4,875	11,092	16,170	Union.....	8,017	6,944	7,171
Knox.....	10,627	11,084	16,057	Brown.....	2,864	4,846	6,508
Greene.....	8,321	12,313	16,043	Pulaski.....	561	2,595	5,708
Morgan.....	10,741	14,576	16,032	Ohio.....	....	5,308	5,475
Fountain.....	11,218	13,253	15,972	Vermillion...	8,274	8,661	5,061
Delaware.....	8,843	10,843	15,865	Jasper.....	1,267	3,540	4,806
Lawrence.....	11,782	12,097	15,738	Blackford.....	1,226	2,860	4,128
Parke.....	13,499	14,968	15,445	Stark.....	149	557	3,209
Sullivan.....	8,315	10,141	15,382	Benton.....	....	1,144	2,432
Huntington...	1,579	7,850	14,935	Newton.....	....	....	2,254
Johnson.....	9,552	12,101	14,855				
Jennings.....	8,829	12,096	14,743	Total.....	685,866	923,430	1,350,000

POPULATION OF NEW JERSEY.

The population of New Jersey for 1860 shows a decided increase, mainly confined, however, to the counties immediately adjoining New York city, or within the circuit of its trade:—

	1840.	1850.	1860.		1840.	1850.	1860.
Essex	44,621	73,950	98,916	Somerset	17,455	19,692	23,200
Hudson	9,483	21,822	65,923	Cumberland ..	14,374	17,189	22,606
Mercer	21,502	27,992	39,949	Salem	16,024	19,467	22,484
Burlington ...	32,831	43,203	39,858	Bergen	13,223	14,725	21,619
Monmouth	32,909	30,313	37,900	Union.....	.....	.....	20,515
Middlesex	21,393	28,635	35,336	Gloucester ...	25,438	14,655	18,448
Camden	25,844	30,153	34,699	Atlantic	8,726	8,961	11,786
Morris.....	.....	25,422	34,159	Ocean.....	.....	10,032	11,209
Hunterdon	24,789	28,990	33,664	Cape May	5,324	6,433	7,162
Passaic	16,734	22,669	29,021				
Warren	20,366	22,368	28,403	Total	373,306	439,555	660,093
Sussex	21,770	22,989	23,691				

INTERESTING SPECULATION.

In the year 1815, the late ELKANAH WATSON, as appears in "Men and Times of the Revolution,"—page 522, 2d ed.—made and published the following estimate of the probable population of the United States for a long series of years. The actual result thus far shows a singular approximation to the calculation. He calculated that the population would be—

1820....	9,625,734; the actual result was.....	9,638,151
1830.....	12,833,645; the actual result was.....	12,866,020
1840.....	17,116,526; the actual result was.....	17,062,566
1850.....	23,185,368; the actual result was.....	23,191,376
1860.....	31,753,854	
1870.....	42,328,432	
1880.....	56,450,241	
1890.....	77,266,989	
1900.....	100,355,892	
1930.....	133,000,000, in round numbers.	
1950.....	177,000,000	"
1970.....	238,000,000	"
2000.....	283,000,000	"

POPULATION OF SPAIN.

Official estimates of the population of Spain, in many respects necessarily imperfect and unreliable, were made in 1768-9, 1833, 1845, and 1850. The published results were as follows:—

1594.....	8,207,000	1833.....	12,287,000
1768-9.....	9,160,000	1846.....	12,163,000
1787.....	10,233,000	1850.....	10,042,000
1797.....	10,551,000		

The new enumeration proves that the inhabitants of the kingdom number 15,464,000 people, existing in an area of 194,782 square miles; thus giving a population of nearly 79 for every square mile, a density about one third that of Great Britain. Four cities of the realm contain over 100,000, namely:—Madrid, with 281,170; Barcelona, with 183,787; Seville, 112,529, and Valencia, with 106,435.

DIMENSIONS OF THE PRINCIPAL EUROPEAN CHURCHES.

The *Roman Advertiser*, in an article compiled to show the impossibility of St. Peter's, at Rome, being ever crowded, gives some curious statistics as to the comparative capacity of the most celebrated churches in Europe. We add a column, exhibiting the number of square yards. Those who attended at St. Peter's during the august ceremonies of Christmas day night, perhaps, have imagined that temple, in all parts open to the public during the function, as much crowded as possible. To show the impossibility of St. Peter's being ever crowded, we annex the following statistics of its capabilities, as compared with other great churches, allowing four persons to every quadrate meter (square yard):—

	Persons.	Sq. yards.
St. Peter's	54,000	13,500
Milan Cathedral.....	37,000	9,250
St. Paul's, at Rome.....	32,000	8,000
St. Paul's, at London.....	25,600	6,400
St. Petronio, at Bologna.....	24,400	6,100
Florence Cathedral.....	24,300	6,075
Antwerp Cathedral.....	24,000	6,000
St. Sophia's, Constantinople.....	23,000	5,750
St. John Lateran.....	22,900	5,725
Notre Dame, at Paris.....	21,000	5,250
Pisa Cathedral	18,000	3,250
St. Stephen's, at Vienna.....	12,400	3,100
St. Dominic's, at Bologna.....	12,000	3,000
St. Peter's, at Bologna.....	11,400	2,850
Cathedral of Sienna.....	11,000	2,750
St. Marks, Venice.....	7,000	1,750

The piazza of St. Peter's, in its widest limits, allowing 12 persons to the square yard, holds 624,000; allowing four to the same, drawn up in military array, 202,000. In its narrower limits, not comprising the porticos or the Piazza Rustiencei, 474,000, crowded, and 138,000 in military array to the quadrate metre.

MARRIAGE IN GERMANY.

Marriage in Germany is preceded by the following forms and ceremonies:—1st, proposal; 2d, betrothal; 3d, a public dinner or supper of announcement; 4th, the protocolling or testimonials required by government—being, 1st, a certificate of vaccination; 2d, a week-day school ticket, in proof of regular attendance there; a certificate of attendance upon a religious teacher—4th, a certificate of confirmation; 5th, a conduct certificate; 6th, a service book; 7th, a wanderbuch, (this refers to the compulsory travels of their handworks burchen or handicraftsmen;) 8th, an apprentice ticket; 9th, a statement made and substantiated as to property, which, if not satisfactory according to circumstances, destroys the whole thing; 10th, a permission from the parents; 11th, residence, permission ticket; 12th, a certificate as to the due performance of militia duties; 13th, an examination ticket; 14th, a ticket of business, or occupation, at the time. The higher classes have more difficulties than these. Thus a Bavarian officer cannot marry until he has provided £40 per annum for his future family.

MERCANTILE MISCELLANIES.

FRENCH WINES.

At present there are some twelve or thirteen thousand vinyard proprietors. The vine growing districts are divided into the Coteaux, the Graves, and the Palus. The Coteaux are the mountain slopes, often so steep that they could be applied to no other purpose, and generally composed of marl, chalk, and argillaceous substances, so badly mixed near the summit as to offer very serious impediments to cultivation. The Graves are plains of diluvian origin, consisting of sand, pebbles, and gravel, intermixed as if by the rapid action of a current of water. The Palus are deep, fat soils, apparently the slow formed sediment of standing water, and the wines made in these show a remarkable fitness for transportation, and are sent in large quantities to India and America. Many of the communes have an European celebrity. The Medoc district lies between the Gironde River and the Gulf of Gascony, and is devoted exclusively to the production of the finest qualities. The commune of Blanquefort is noted for a delicious, dry, white wine, and the red wines of this region are free from that earthy flavor which is the common defect of wines raised on the plain. The neighboring canton of Cantenac is also famous for the softness and bouquet of its wines, and to the south lies Margaux, on a flinty gravel, where about 1,000 tuns are raised annually.

The celebrated estate of Chateau Margaux produces rather more than one hundred tuns, and is eagerly welcomed all over the continent. The Champagne district comprises the Ardennes, Marne, Aube, and Haute Marne. In the Marne the product of the arrondissement of Epernay is calculated at the value of three million francs per annum; that of Reims at six millions; that of Vitry at nearly a million and a half. The best red wines go to the low countries, Prussia, and the Rhenish Provinces; the Sillery comes principally to England. Here the greatest care is necessary; every imperfect grape is excluded, and every rough motion guarded against. The must, having been pressed, is turned into a vat for some hours to deposit its grosser lees; it is then allowed to ferment, and by Christmas, when the fermentation is well over, and the weather dry and frosty, the wine is racked and fined. These processes are repeated at different intervals, according as the wine is intended to be mousseux or still. The process of bottling is excessively troublesome. In the first place the wine is very capricious about becoming effervescent. Sometimes the desired change takes place in a fortnight, sometimes not for many weeks. Sometimes, when it has obstinately withstood every attempt for a length of time, it will become sparkling without the least apparent reason. The bottling is done by workmen in sets of five, called ateliers, each man having his own portion of the task. M. MOET, at Epernay, has seldom less than half a million bottles to be thus filled, and often ten ateliers at work at the same time.

The bottles, when filled, are carried into vaults excavated in the chalk rock, and here numbers explode from the formation of carbonic acid gas. Sometimes, in July and August, the explosions have been known to range as high as 40 per

cent of the whole number. The proprietor generally acquiesces in the loss of 8 per cent, but after that stage the gas is considered to be becoming "furious," the bottles are taken down, placed in a lower cellar, flooded with cold water, and sometimes uncorked. In September the breakage ceases, and in October another process is commenced. A deposit has by this time formed in the bottles, and to get rid of it they are placed topsy-turvy for some days, and slightly tapped at intervals. This disengages the deposit, and makes it fall on the cork. A clever workman then cuts the fastenings, lets off the cork, which carries the deposit along with it, and a fresh one is then inserted before the wine has time to escape. If wine is kept long, it is sometimes subjected to several of these degagements, whereby greater purity is obtained, and its costliness, of course, seriously enhanced.

The only other district we can notice is that of Drome, which is the native soil of Hermitage. Real Hermitage is made from the Seyras, a Persian grape, and is found on the hills from St. Vallier to Tain. It goes on improving for ten or fifteen years, and is generally not bottled till it is five or six years old. The white Hermitage is made from the Roussanne grape, and is extraordinarily slow in the process of fermentation. The annual yield of real white Hermitage is probably not more than 120 casks of 210 litres apiece. It will keep perfectly good for a century, though after thirty years its perfume and taste are slightly modified. The straw Hermitage is the best of the French vins de liqueur. The most perfect grapes are chosen and laid to dry upon straw for five or six weeks; they are then plucked from the stems and carefully pressed. Little of it is made, and its price is enormous, from the frequent failures against which the manufacturer has to contend, since it is only when the grape is in a particular stage of maturity and the weather precisely suitable, that Hermitage Paille can be successfully produced.

WEALTH vs. HAPPINESS.

The insufficiency of mere wealth to confer happiness is strikingly illustrated in the life of NATHAN MYERS ROTHSCHILD, the Jew, who died in London some years ago, "one of the most devout worshipers that ever laid a withered soul on the altar of Mammon." For years he wielded the purse of the world, opening and closing it to kings and emperors as he listed, and upon certain occasions was supposed to have more influence in Great Britain than the proudest and wealthiest of her nobles—perhaps more influence than the houses of Parliament together. He once purchased bills of the government in a single day to the amount of twenty millions, and also the gold which he knew the government would have to pay them; and with the profits of a single loan purchased an estate which cost him seven hundred thousand dollars. But with the clearest and widest comprehension in money matters, with the most piercing insight into all possible effecting causes in the money market, and with ingenuity to effect the profoundest, most subtle, and most unsuspected combinations—an ingenuity before which all the other prodigies of calculations sink into insignificance—he was, withal, a little soul. He exercised his talents and calculating powers, not only for the accumulation of millions, and the management of national creditors, but also for the determination of the smallest possible pittance on which a clerk's

soul could be retained in connection with his body. To part with a shilling in the way of charity cut him to the heart. One of his grand rules, "Never to have anything to do with an unlucky man or place"—which was also one of JOHN JACOB ASTOR's principles—however shrewd in a worldly point of view, was the very quintessence of selfishness and Mammonism. He was, in short, a thorough-going Mammon-worshiper—his soul converted into a machine or engine for coining guineas, and every emotion, immortal longing, dead within him. Guineas he did coin to a sum almost fabulous; but with all his colossal wealth he was profoundly unhappy; and with sorrowful earnestness once exclaimed, to one congratulating him on the gorgeous magnificence of his palatial mansion, and thence inferring that he was happy, "*Happy! me happy!*"

THE COMPASS—ITS VARIATION AND DEVIATION.

TO CHRISTOPHER COLUMBUS is justly attributed the discovery of the variation of the compass, and to DAMPIER that of *local attraction*, or the deviation of the needle from its true meridian. The variation is far, open, and above board, but the deviation is a secret enemy, concealed from observation, and unless detected and its effects avoided by due allowance, the destruction of the ships and loss of life is tolerably certain. The names of FLANDERS and BARLOW deserve to be honorably mentioned in connection with local attraction, who tried many experiments and made many useful discoveries, among which may be mentioned that important one that all the influences of iron bodies exerted on the compass are on their surfaces. Experiments will show that the compass will give different bearings of the same object when placed in different parts of the ship; that when the ship's head is on the magnetic, north or south, there is no perceptible effects from local attraction, because when the ship is in that position the attraction of the various masses of iron on board acts in unison with the magnetism of the earth; and when the ship's head is on the east or west points, the local attraction is the greatest, and at the intermediate points the deviation of the needle varies nearly in the proportion of the sine of the angle between the bearing of the ship's head and the magnetic meridian to radius, and the maximum of deviation in the same compass will be different in different parts of the ship and in different parts of the world; or, that the force of the local attraction of the vessel varies with the dip of the magnetic needle, or in proportion to the distance from the magnetic equator. The Polar expedition from England in 1818, afforded Professor BARLOW (a name well known in the annals of science) an admirable opportunity for confirming still further the laws laid down by FLANDERS, as the ships passed through a considerable variety of variation, and also approach the north magnetic pole. Constant observations were accordingly made on board the Alexandria and Isabella, at the suggestion of the professor, and it was found before they had nearly reached Greenland that the compasses of one ship differed as much as 11° from those of the other ship, and that the same compass gave different results to the extent of 10° in different parts of the same ship. As the two vessels passed up Davis Straits the compasses became sluggish; and in the subsequent voyage of Sir E. PERRY, as he passed through Barrow Straits, they became totally useless; thus confirming the conclusion of FLANDERS, that although the absolute magnetic force of the earth would be greatest at the magnetic pole, yet its horizontal or directive power would then entirely cease, having become gradually less in proportion as the angle increased, which the dipping needle makes with the horizontal plane. But while the horizontal needle is thus forsaken by the earth's magnetic power, the various magnetic bodies in the ship which surround it are still acting on it with a directive force which *relatively* increases as the directive force of the magnetic pole diminishes.

The discordance in the variations observed at sea, and the difficulty of arriving at the actual inclination which the magnetic meridian makes with the true

one, can only be attributed to the want of a due observance of the foregoing facts. But those facts are now so universally admitted that it is unnecessary to multiply proofs either of their existence, or of the evil consequences which must arise from their neglect. Whatever may be the number of compasses carried to sea in a merchant ship, one only at a time should be used on deck, and that should be always in the binnacle, its proper place.

Most ships, however, have a double or second binnacle, and the compass in the one serves as a check on the other. But, like two of a trade, they seldom agree, wrangling or disputing about a half or a quarter of a point. If this difference was constant, it might be reconciled, and be considered one and the same thing, but that is not the case. A good steering compass, being once installed in the binnacle, becomes responsible for the whole magnetic affairs of the ship, a most onerous duty, but one that it is quite capable of undertaking. Magnetism, under its most finished appliances, is but an unsatisfactory subject in point of precision. It can scarcely be ranked among the sciences. Indeed, the more perfect the needles are the more evident become their discordances; and any magnetic needle is but a means of knowing at all times the direction of the true meridian by applying its *ascertained* variation. Two magnetic needles are seldom known to give the same magnetic meridian, even when *free from* local attraction. The natural conclusion of all this is, that we must not attempt to deal with the compass by hairs' breadths. If we can be certain always that it will give a bearing within the same *degree* of the horizon, in our dealings with it, we shall have good reason to be satisfied. What is a degree of the horizon? About twice the diameter of the sun. The navigation of a ship would be perfect, indeed, if after a voyage she would make a lighthouse within these limits. Such perfection is not, however, to be expected in all cases in the present imperfect state of our mercantile marine, nor can it be so while men, ignorant of our language, green hands, ignorant of their duty, are shipped for seamen, and *dollars* are considered the *first* qualification to procure command of a ship, and while natural science, seamanship, and *habitual sobriety* are scarcely recognized as qualifications in officers. Therefore compasses graduated to degrees, without affecting minutes, may well be said to be sufficient for all the common purposes of navigation.

A CHINESE MERCHANT.

I lately visited, says a correspondent in the *Gazette de France*, the estate of a Chinese merchant of Canton, named PORTINGUA, and on which he spends 3,000,000 francs a year—an immense sum in a country where labor is to be had almost for nothing. The property is larger than a king's domain. This Chinaman made his fortune in the opium trade, and is said to possess more than 100,000,000 francs. He has fifty wives and eighty domestics, without counting thirty gardeners, laborers, &c., and owns in the north of China a still finer estate. He has a great liking for the French and receives them well. When I went with two friends to visit his mansion, he had just left, but I was received by a steward who conducted us over the house and grounds. In front of the house is a vast garden, in which are the rarest flowers, and a wide alley leads to the principal entrance. The apartments are vast, the floors being in marble; they are ornamented with columns of the same material and of sandal-wood, encrusted with mother-o'-pearl, gold, silver, and precious stones. Splendid looking glasses of a prodigious height, furniture in precious wood covered with Japan lacquer, and magnificent carpets of velvet and silk decorate the rooms. The apartments are separated from each other by movable partitions of cypress and sandal-wood, which are ornamented with charming designs, and cut right through the wood, so to permit one room to be seen from the other. From the ceilings are sus-

pended chandeliers ornamented with precious stones. There are more than thirty piles of buildings in the whole edifice, which are united by covered galleries with columns and pavements in marble. The lodgings of the women are decorated with more than Eastern splendor. An entire army might be lodged in the house and grounds. Water courses, on which are gilded junks, traverse them in all directions; and at intervals are vast basins, in which are swans, ibises, and an infinite variety of birds. There are also pagodas nine stories high, which are very remarkable; some are in marble, others in sandal-wood, carved with great art. In the gardens are extensive aviaries of the rarest and most beautiful birds. In front of the women's apartments is a theater in which a hundred actors can perform, and so placed that people in the apartments can see without difficulty. Near the outer door is a printing office, in which M. PORTINGUA causes the memoirs of his family to be prepared for posterity.

TEN YEARS.

The changes which have taken place between 1850 and 1860 in the economic condition of our country are very great. In that period the gold mines have been discovered in California and Australia. In 1840 we had \$4 paper circulation to \$1 of specie; in 1850 only \$3 to \$1; in 1860 less than \$2 to \$1. In 1849 the product of precious metals was \$95,000,000; in 1859 it was \$264,000,000. The whole amount now in the world is estimated at \$10,000,000,000, of which six-tenths is silver. It was always supposed that a sudden increase in the quantity of money increases prices. This has not proved true, for in spite of the influx of gold, and in spite of the repeal of the English corn laws, which has enabled us to export immense quantities of flour and grain, prices in general are lower and wages higher than they ever were before. Tables show that prices generally during forty years were highest in 1837 and lowest about 1843. Flour was so scarce in 1847 that we imported \$5,000,000; its average price for forty years has been \$6 54 per barrel. The sale of tea has increased in twenty-five years from 13,000,000 to 36,000,000 pounds, the average price for that period has been 48 cents. The cotton crop has increased in forty years from 180,000,000 to 1,800,000,000 pounds. A great demand for breadstuffs from 1850 to 1857 occasioned by railway labor and the repeal of the British corn laws, kept prices generally on the advance; but in 1857, on account of the abundant crops, the slackening of the shipping and railway interests, and a glutted cotton market, a downward tendency prevailed. Our exports of breadstuffs from 1850 to 1860 were \$480,000,000. Prices do not seem generally to be affected by the fluctuations of paper currency. In 1849 the bank-note circulation was \$119,000,000; in 1852, \$173,000,000; in March, 1858, it was \$120,000,000, shortly after which it rose to \$156,000,000.

THE NATURE OF WEALTH AND POVERTY.

Men rarely know the meaning of the word "rich." It is a relative word, implying its opposite "poor," as positively as the word "north" implies its opposite "south." Men nearly always speak and write as if riches were absolute, and it were possible, by following certain scientific precepts, for every body to be rich. Whereas riches are a power like that of electricity, acting only through

inequalities or negations of itself. The force of the guinea you have in your pocket depends wholly on the default of a guinea in your neighbor's pocket. If he did not want it, it would be of no use to you; the degree of power it possesses depends accurately upon the need or desire he has felt for it; and the art of making yourself rich, in the ordinary mercantile economist's sense, is therefore equally and necessarily the art of keeping your neighbor poor. An accumulation of real property is of little use to its owner unless, together with it, he has commercial power over labor. Thus, suppose any person to be put in possession of a large estate of fruitful land, with rich beds of gold in its gravel, countless herds of cattle in its pastures; houses and gardens, and storehouses full of useful stores; but suppose, after all, that he could get no servants. In order that he may be able to have servants some one in his neighborhood must be poor, and in want of his gold or his corn. Assume that no one is in want of either, and that no servants are to be had. He must therefore bake his own bread, make his own clothes, plow his own ground, and shepherd his own flocks. His gold will be as useful to him as any other yellow pebbles on his estate. His stores must rot, for he cannot consume them. He can eat no more than another man could eat, and wear no more than another man could wear. He must lead a life of severe and common labor to procure even ordinary comforts; he will be ultimately unable to keep either houses in repair or fields in cultivation, and forced to content himself with a poor man's cottage and garden in the midst of a desert of waste land trampled by wild cattle and encumbered by ruins of palaces which he will hardly mock at himself by calling "his own."

THE ENVELOP BUSINESS.

This has now become one of the most important branches of business, and a large capital is invested in it in various places. Envelops were not introduced into Great Britain until the year 1839, and it was many years after that before they became generally used there. In this country it was not until the year 1845 that they were adopted, but in 1850 it is said 100 out of every 112 letters were protected by an envelop, and since that time they have almost universally been employed. For some time envelops were cut out and folded by hand, but the increasing demand soon led to the invention of machines for this purpose. In this country Mr. GERALD SICKLES, of New York, was the first to perfect a machine, which answered a very good purpose for a while, but it is now superseded by others of a much better order, and at the present time Messrs. TRUMBULL, WATERS & Co., of this city, are supposed to own the patent of the best machine for the manufacture of envelops which is used. It is the invention of Dr. R. L. HAWES, of this city, who is the originator of the envelop business here. The present firm of TRUMBULL, WATERS & Co. have in use seventeen of these machines, the capacity of each being 10,000 per day. They employ steam power, and produce about 60,000,000 envelops annually, which are valued at \$1 75 a thousand on an average, and which find a market in all parts of the country. they being sold to jobbers in every principal city of the Union. The largest shipment in any one lot was seven tons sent to one jobber to fill an order. They manufacture 250 varieties and sizes, and of all styles, and employ seventy-five persons in the business.

THE BOOK TRADE.

- 1.—*Notes on the Parables of our Lord.* By RICHARD CHENEVIX TRENCH. 12mo., pp. 288. New York : D. Appleton & Co.

All freely acknowledge the great superiority of Dean Trench's work on the Parables to any other on the subject in the English language. Unsurpassed by none in depth of spiritual insight, or in truly evangelical sentiment, it is unrivaled by any in elaborateness and critical value. The author would seem to have left nothing unexamined that could by possibility throw even a side-light on these mysticisms. To the Christian student the book is invaluable. But the size and consequent cost of the work have kept it beyond the easy reach of very many. In addition to which full one third of the book is in the shape of notes in other languages, Greek, Latin, French, and German. A chief object of the present volume is to meet the wants of the large class of readers just referred to ; it has been thought also that "Bible Classes" will be alike profited and pleased with its use, inasmuch as the substance of the larger work is given in very nearly the author's own words, the reduction in size having been mainly effected by the omission of detailed accounts of erroneous views and their refutation, and of most of the notes, these last after having been carefully translated and inwoven with the text. Thus little of interest to the general reader has been omitted in this humbler volume.

- 2.—*The Heroes of Europe : a Biographical Outline of European History, from A. D. 700 to A. D. 1700.* By HENRY G. HEWLETT. 12mo., pp. 370. Boston : Ticknor & Fields.

This work, the author tells us, in his otherwise inexcusable omission of Englishmen, has been intended as a companion to Mr. J. G. Edgar's *Heroes of England*. The plan and scope, however, of the two volumes are materially different. Mr. Edgar confining himself to the biographies of those heroes, who, against the enemies of their country have fought her battles on sea and land, while the author of the present work has given a wider meaning to the word hero, and endeavored to furnish a biographical outline of European history from the eighth to the eighteenth century. With this aim he has been influenced in his selection of heroes, less by a consideration of their personal eminence than of their representative value. Particular epochs, movements, and episodes have thus been illustrated in a single sketch, and threads of connection preserved throughout the series. Thus in a few pages we have brief but perfectly accurate and comprehensive sketches of the lives and achievements of such men as Charlemagne, Hilderbrand, Godfrey de Bouillon, Cosmo di Medici, Niccolo Macchiavelli, Bayard, Gustavus Vasa, Conde the Great, Richelieu, Wallenstein, &c., &c., making up a most readable and instructive volume.

- 3.—*Home Ballads and Poems.* By JOHN GREENLEAF WHITTIER. 12mo., pp. 210. Boston : Ticknor & Field.

The reading public are all familiar with WHITTIER's poems, and the fragments we every now and then see flying around, marked, as they always are, by deep feeling, delicate sentiment, and lively fancy. In this little volume, styled *Home Ballads*, he mixes up with legends matters of fact and every-day life, which, as usual, he clothes with the liveliest aspirations of fancy. As a poet, Mr. WHITTIER no doubt possesses distinctive talent. His sentiments are always pure and high, and his mind creative and fanciful ; but to our mind too much of an alchemist by half, and often influenced by undue sympathies to the building up of deities which some, no doubt, would analyze as Puritanical bigotry, heightened by imagination, attempting to lift mountains of fate.

4.—*Faithful Forever*. By COVENTRY PATMORE, author of "The Angel in the House." 12mo., pp. 240. Boston: Ticknor & Fields.

We liked to have called this a mere bundle of senseless trash, void of rhyme or reason; but, on a closer inspection, find it to be a very fair household poem, evincing considerable poetic merit, as is proven by the extract below of an old man's experience of wedlock. Others have gone much further than this in way of eulogy, pronouncing the whole poem as a finished and tender work of a very noble art:—

"Few, if 't were known, wed whom they would;
And this, like all God's laws, is good.
For naught's so sad the whole world o'er
As much love which has once been more.

Glorious for warmth and light is love;
But worldly things in the rays thereof
Extend their shadows, every one
False as the image which the sun
At noon or eve dwarfs or protracts,
A perilous lamp to light men's acts!
By Heaven's King, impartial plan,
Well wived is he, that's truly man,
If but the woman's womanly,
As sure I am your choice must be.
Lust of the eyes and pride of life
Perhaps she's not. The better wife!
If it be thus, if you have known
(As who has not?) some heavenly one
Whom the dull background of despair
Help'd to show forth supremely fair;
If memory, still remorseful shapes
Young passion bringing Eschol grapes
To travelers in the wilderness,
This truth will make regret the less;
Mighty in love as graces are
God's ordinance is mightier far;
And he who is but just and kind
And patient, shall for guerdon find,
Before long, that the body's bond
Is all else utterly beyond
In power of love to actualize
The soul's bond which it signifies,
And ever to deck a wife with grace
External in the form and face.
A five years' wife and not yet fair?
Blame let the man, not nature bear!" etc., etc.

5.—*The Conduct of Life*. By R. W. EMERSON. 12mo., pp. 288. Boston: Ticknor & Fields.

In this we have a number of essays from the well-known and popular pen of RALPH WALDO EMERSON, embracing the topics of common life, such as Power, Wealth, Culture, Behavior, Worship, Beauty, Illusions, etc., etc., written in that pungent, happy strain for which he is remarkable. What EMERSON is particularly good at is description, or rather celebration. He very seldom leaves us any available rules to go by, tending to enhance our own power or enlarge our fields of action; and yet his vigor is contagious, and is sure to set us thinking strongly for the moment, but, to use a simile of his own, what he says is like the cement which the peddler sells at the door; he makes broken crockery hold with it, but you can never buy of him a bit of the cement which will make it hold when he is gone.

Home Insurance Company of New York.

Office, No. 112 and 114 Broadway.

CASH CAPITAL, ONE MILLION DOLLARS.

ASSETS, 1st JULY, 1888, \$1,851,519 37.

LIABILITIES, 654,968 67.

THE OFFICERS & DIRECTORS herewith present to the Shareholders and Patrons of the Company their ANNUAL STATEMENT OF ASSETS AND LIABILITIES, showing the condition of the Company on the 1st day of July, 1888.

THE HOME INSURANCE COMPANY continues to insure against loss or damage by FIRE, and the dangers of STEAM NAVIGATION AND TRANSPORTATION, on terms as favorable as the nature of the risk and the good security of the insured and of the Company will warrant. LOSSES EQUITABLY ADJUSTED AND PROMPTLY PAID.

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ABSTRACT of the Forteenth Semi-Annual Statement of the condition of the HOME INSURANCE COMPANY, at the City of New York, on the 1st day of July, 1888.

ASSETS.

Cash, interest in hand	\$86,255 24	Real estate, No. 4 Wall street.	65,822 80
Standard mortgages, (showing first lien on real estate worth at least \$1,750,000)	925,682 09	Interest due 1st July, 1888, on which \$25,119 31 has since been received	27,086 20
Loans on stocks, payable on demand.		Balance in bonds of agents and in course of transmission from agents on 1st July (of which \$9,892 66 has since been received)	30,873 04
Joint value of securities (\$125,860)	96,414 00	Bills receivable (for premiums on inland risks)	82,890 13
Gold stocks, (market value)	25,025 00	Premiums due and uncollected on policies issued at office	1,157 16
U. S. Treasury notes (market value)	109,875 00		
Gold and silver water loans	10,250 00		
U. S. Government bonds, (market val.)	8,000 00		
Foreign State bonds, (market value)	16,500 00		
Foreign State bonds,	17,888 99		
			\$1,481,519 37

LIABILITIES.

Unpaid loss claims outstanding on 1st July, 1888	\$54,968 67
New York, 1st July, 1888.	
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ASSETS, OVER SIX MILLION DOLLARS—Viz.:

Stocks of the United States, of New York, and of New York City Banks	\$2,567,921 01
Loans secured by stocks, bonds and mortgages, and otherwise	755,810 80
Real Estate	209,500 00
Advances on stocks, interest on bonds and mortgages and other loans, pending	
Claims, Reinsurances, and other claims due the Company, estimated at	115,407 45
Provision for taxes and bills receivable	3,181,900 33
Cash in hand	192,794 65

Oct. 10, 1888.

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(JULY, 1860.)

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CCLX.



HUNT'S

MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

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See last report at the end of this Number.

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NUMBER II

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HUNT'S MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

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FEBRUARY, 1861.  
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Art. I.—QUARANTINE REGULATIONS.

Proceedings and Debates of the Fourth National Quarantine and Sanitary Convention, held in the city of Boston, June 14, 15, and 16.—REPORTED FOR THE CITY COUNCIL OF BOSTON.

Quarantine Regulations, as approved by the National Quarantine and Sanitary Association of the United States, 1860.—A Report by A. N. BELL, ELISHA HARRIS, AND WILSON JEWELL.

DR. WILSON JEWELL, of Philadelphia, after an experience of eight years as a member of the Board of Health of that city, and after a careful examination into the practical working of the quarantine laws of the United States, became convinced that they were the outgrowth of dogmas based upon obsolete theories; "that they embarrassed commerce, oppressed the merchant, imposed severe restrictions on the healthy, inflicted cruelties on the sick, and, when rigidly enforced, became the ready means of disseminating and entailing disease and death. These glaring imperfections, and the inconsistency of quarantine enactments with each other in the different States, together with the frequent embarrassments arising from abortive efforts to enforce and apply quarantine regulations, engaged my serious attention. Thus circumstanced, I was prompted to the inquiry—how can a revision of the present ill-advised systems of quarantine laws be most judiciously and extensively effected? A uniform code of regulations, operating alike in all our seaports, and offering the least hinderance to an active commerce, and with a humane regard for the health of the passengers and crews, and the comfort of the sick on board of all vessels detained at quarantine stations, suggested itself as the only correct fundamental principle for accomplishing the necessary reform in quarantine legislation.

"A knowledge of the fact that, with the great commercial nations of Europe, the efficiency of quarantine had assumed a very commanding posi-

tion among the topics in the science of hygiene, and had led to the holding of a *Conférence Sanitaire* in Paris in 1851-2, offered to my mind the idea that a national convention of judicious and well-informed delegates from the seaboard cities of our Atlantic States, might be influential in adjusting disputed points, and become the medium through which commerce could be relieved from the trammels that existing codes of laws had unnecessarily imposed upon it." Following up these reflections, on the 10th of November, 1856, at a meeting of the Board of Health of Philadelphia, Dr. Jewell offered and obtained the adoption of the following resolution:—

"*Resolved*, That a committee of three, with the president, be appointed to correspond with the Boards of Health of New York, Boston, Baltimore, and New Orleans, on the propriety of calling a convention of delegates from the various boards of health in the maritime cities of the United States, for the purpose of a conference in relation to the establishment of a uniform system of revised quarantine laws."

As chairman of the committee under this resolution of the Philadelphia Board of Health, Dr. Jewell urged the importance of a revised and uniform system of quarantine laws for the protection of the maritime cities of the United States; and in response to his call, the first Sanitary Congress in America was held in the Supreme Court-room, in Philadelphia, May 13th, 1857. The Convention remained in session three days, and resulted in the adoption of a series of recommendations pertinent to quarantine reform. It was at this first meeting of individuals declaring for a reform in quarantine regulations, that the "Quarantine and Sanitary Convention" received its name.—*Introduction to the report of the third national quarantine and sanitary convention.* By Wilson Jewell.

"*Hunt's Merchants' Magazine* for October, (1856,) contains a very able article on the subject of quarantine, written by Dr. A. N. Bell, of Brooklyn. Dr. Bell was formerly a surgeon in the U. S. Navy, and has had favorable opportunities for investigating the subject of which he treats. His view is that infectious diseases are propagated by *things*, and not by persons, and he therefore argues against a quarantine as applied to the latter, who should be cleansed from infectious things, and allowed their freedom. He recommends the erection of warehouses at a sufficient distance from the city, where every infected ship should be unladen, and then purified and allowed to proceed on its voyage, or go to sea again."—*N. Y. Journal of Commerce.*

The article in our Magazine, of which we have quoted the above notice, gave a brief history of quarantine from its origin, identifying it with a belief in the contagiousness of epidemic diseases, which belief was common in the fourteenth century; and forcibly depicted the inconsistency of such false dogmas with the present certainties of science.

"Everywhere dense population, misery, want, and filth constitute the source as well as the contagion of epidemics, but at this very day, the 1st day of September, 1856, almost in the center of one of the largest commercial cities in the world, is gathered the detritus of every sickly clime, to be crammed in and crowded round the quarantine of New York! Do the filthy rags of the tropics—for there has been an infected ship and cargo of them at New York quarantine since June last—grow less "contagious" from the heat, darkness, and confinement of the hold of a ship?

Do the putrid hides of South America and the goat skins of Cape de Verdes become tanned of their poison by wreaking it on the inhabitants of a populous city? Ay! they do. ONE HUNDRED AND FIFTY OF SUCH SHIPS AND SUCH CARGOES. are now surrounded by the shores of New York bay!

"But, alas! for the poor passengers and sailors, they are quarantined; many of them quarantined as are the victims of this relic of barbarism, on the Bay Ridge from Fort Hamilton to Brooklyn.

"Yet these ships and these cargoes are now as they would have been centuries ago; they are as the thirty feet deep of slime from the table lands of Abyssinia deposited in the lap of Egypt, as the Hooghly exhaling its putrid remains, or as the gleanings of the Father of Waters, in which crocodiles only can revel—all, all these things lost sight of in the heartless selfishness which dictates a quarantine for persons—a seclusion of the sick and needy! It is an anomaly in the age of Christianity and civilization. In the midst of free schools, free academies, and public charities, we are appalled by an infatuated fanaticism which should only be measured by the ages which gave it birth. Every ennobling sentiment of the human soul revolts with horror at the idea of the seclusion which the enforcers of quarantine would practice upon one in the time of greatest need. It is adverse to every impulse of sympathy—antagonistic to all the kindly emotions of the heart, it inculcates a beastly selfishness and fratricidal barbarism which has, in the nature of causes, always brought upon the enforcers of it a retributory certainty of infliction with the worst horrors of their imagination, in a degree of concentrated strength proportionate to their efforts to restrain it. The barricaders of black death who were infatuated by the hideous terror of judgments inflicted for secret sins, were in some degree excusable in acts measured by the light of science, but that such inhumanity, such remorseless heartlessness and cowardly selfishness should exist and be tolerated now, is surely the most inconceivable incident of barbarism connected with the present age.

"There are at this time agitators for the removal of the New York quarantine from its present site to a greater distance from this city, with the avowed object of effecting a more perfect seclusion of the sick. Surely every individual of common intelligence can now comprehend the practical truth, that pure air is the only real security against epidemics. In all the regulations of quarantine this prime necessity has ever been overlooked; confinement in a foul atmosphere has been the distinguishing feature of sickly ships, quarantine hospitals, and lazarettos, in all ages, everywhere; they convert common fevers into pestilence, which, in their attempt to restrain, they oftentimes render contagious, and they are of all others the most concentrated foci of disease. They constantly avert the attention of the public from the true precautionary sanitary measures, under the absurd impression that epidemics can be shut out or barricaded like unwelcome visitors.

"It is unnecessary now to state that there is no disease to which mankind is heir, contagious or non-contagious, which may not be aggravated by the infliction of quarantine on persons; and quarantines, as heretofore conducted, are necessarily dangerous and disease-producing in proportion to the strictness with which the laws that govern them are enforced. What is the disease which any community would fear from contagion? Small-pox is perhaps the most pre-eminently contagious epidemic that

prevails, but can it prevail in any civilized community in the world? Certainly not. The guard against it from contact is perfect by vaccination, which can be made universal without an item of expense to the city or State. There is no disease compatible with cleanliness which may occur at all, that can be otherwise influenced than aggravated by the quarantine of *persons*.

"But of *things*. Well ventilated and cleanly ships rarely or never have to stand quarantine, no matter what their cargo, or port from which they last cleared.

"Ships which are built without proper provision for fresh air, overcrowded with passengers, or not kept clean, are those which come into port infected. That a large number of such, congregated together, may prove a fruitful source for epidemics, there is abundant evidence: a prominent exemplification now exists at the New York quarantine. And the spread of disease from them can only be measured by the conditions adequate to its support.

"If ships are properly ventilated and kept clean they are the most healthy of human abodes, because they have the freest access of pure air. Ships without proper provision for fresh air sometimes lie for long periods in sickly harbors and take in such cargoes as may render it impossible to prevent their accumulating the seeds of disease; others take on board loads of human beings with closely packed clothing and rubbish, frequently from the vilest dens of corruption; and others are freighted with filthy rags, hides, etc., liable to contain infection to begin with, and sure to generate it if not exposed to the free access of air, which will multiply and break forth with violence commensurate with the conditions which favor it. On arrival, the practice of quarantine is, if any one on board is sick of an infectious disease, not only to detain such one on board to continue inhaling the poison which is destroying life, but to detain all the rest, likewise, till they are also poisoned; the alternative to this is the quarantine hospital, to be surrounded by misery in order to alleviate it! Nor does it end here; the ship and cargo of poison is anchored in the midst of a populous community for the exhalations which arise from her hold to poison the air they breathe—disease and death thus stabbing in the dark, while the victim is under a false sense of security from the traitor he has nourished in his bosom.

"Can any one now survey the quarantine ground and harbor of New York—and other quarantines are just as bad—and view the crape-clad mansions which border the finest bay in the world, without revolting from his inmost soul against quarantines?

"But what should be done with infected ships and cargoes; the infected *things* which entail disease and death? The principles of economy alone will dictate a ready reply. Let warehouses be erected, with proper provision for security and the admission of free air—nature's great disinfectant—at a sufficient distance from the city, and there let every infected ship be at once unladen, and the ship ventilated and permitted to go to sea again.

"And of *persons*, would any one, *can* any one, apply quarantine to himself, and say, seclude them from all human sympathy, from the tender look, the gentle hand, the—

"No, never! *Persons* communicate no infection, carry no epidemics. Banish the very name of quarantine, as applied to them, and require

that they only be detained, when necessary, long enough to *secure cleanliness*, and prohibit the taking of clothing, baggage, and the like, which has been subject to infection, till it is cleansed and purified.

“*Things*, and not *persons*, cause and propagate disease.”—*Merchants' Magazine*, Oct., 1856.

Concurrent with the views embodied in the foregoing extracts, Dr. Elisha Harris, of New York, at that time physician-in-chief of the Marine Hospital, was practically working out, so far as possible under existing laws, a system of executive management of quarantine, applicable to all the varying conditions of climate and commerce. In his annual report for the year 1856, the origin and progress of *things* infected with yellow fever, in contradistinction from the *persons* to whom the things communicated this much-dreaded disease, Dr. Harris mapped out, as it were, the very paths and by-ways of disease into populous communities. And it is from such reports as this that a system or code of marine hygiene has been deduced of universal application.

The second Quarantine and Sanitary Convention was held in Baltimore, April 29th, 1858. The third, in New York, April 27th, 1859, and the fourth, in Boston, June 14th, 1860.

At the third National Quarantine and Sanitary Convention, held in New York, the following resolutions were adopted:—

Resolved, That the operations of quarantine should not be confined to the warm months of the year, inasmuch as a vessel arriving in mid-winter with small-pox or typhus on board, is as legitimate a subject for quarantine as one arriving in mid-summer.

Resolved, That the adoption, by the commercial nations, of a sound and well-digested code of marine hygiene, and of the necessary measures for insuring its strict enforcement, would tend greatly to alleviate the evils of the present system of quarantine, and promote the comfort of passengers and crew.

Resolved, That this convention appoint a committee to consider and report in what manner the foregoing resolutions may be most effectually carried out.

Resolved, That the committee report, at the next meeting of this convention, (in Boston, June 14, 1860,) specific recommendations of principles and measures of quarantine, as severally applicable to yellow fever, cholera, typhus fever, and small-pox, having reference also to the variations which different localities require.

The report, by Drs. Bell, Harris, and Jewell, is in response to these resolutions. These gentlemen, it appears through the State Department of the U. S. and other sources, obtained the quarantine regulations of all the chief commercial nations. From these, and their own experience, they have presented a report incorporating a *sound and well-digested code of marine hygiene*. They have preceded this with a brief history of quarantine reform in Europe, and “find, with chagrin, that, after diligent investigation, the quarantine regulations of the United States are nearly identical with the most odious restrictions of Europe thirty years ago. They are in effect the same laws as those imposed by England in colonial times, for the protection of America from “plague or other malignant distempers,” and in several of the States it yet remains an indictable offence, with a large penalty, for any person to come into the State from any place infected with a contagious disease. The quarantine laws still presume that certain diseases are communicable from the sick to the well, under all circumstances, and that such diseases are capable of being transmitted to new and distant localities, independent of all conditions.

They also presume that the germs of all diseases regarded by quarantine officials as contagious or infectious, may lie dormant in the systems of persons who are apparently well, but who may afterwards sicken, and then become the radiating centers of infection. Based upon these conclusions, the *time* and *duration* of quarantine pretend to depend upon the real or suspected presence of the apprehended disease, in the *personnel* of any vessel during the voyage and at the time of arrival, the kind of cargo, and whether there has been any communication with other vessels, persons, or things during the voyage. These requirements, however, are of short duration, and usually limited to the warm season of the year. This *résumé* is a fair representation of the quarantine regulations of the United States, while there are no exceptions to the incongruities herein stated."

The report then proceeds to point out the special defects and wants that are acknowledged to exist in all, or at least most, of the ports in the civilized world.

On *quarantine docks and warehouses* they incorporate an able report made to the same Convention, by Drs. John W. Sterling, Alex. H. Stevens, and J. McNulty. Following this—the *specific measures of quarantine, severally applicable to yellow fever, cholera, typhus, and small-pox, with the variations which different localities require*; quarantine hospitals, and the proper care of the sick, location, construction, and the executive management of quarantine hospitals, docks, and warehouses, are all discussed in a masterly manner, and utilized to the simplest comprehension. And then follows the—

CODE OF MARINE HYGIENE.

DECLARATIONS.

1. Every organized government has the right of protecting itself against the introduction of infectious diseases, and of putting any country, place, or thing in quarantine which would introduce infectious diseases; provided, however, that no sanitary measures shall go so far as to exclude or drive from port a vessel, whatever may be her condition.

2. The only diseases at present known, against the introduction of which general quarantine regulations should be enforced, are plague, yellow fever, cholera, small-pox, and typhus fever. As regards plague, the European Congress at Paris had the right to settle the question for the nations there represented; and inasmuch as they and the other nations of the eastern continent have reason to subject the plague to quarantine restrictions, the States of America yield implicit obedience to that convention.

3. All quarantine regulations, of any place whatever, should bear with equal force against the toleration or propagation of disease as against its introduction; and authority to prevent the introduction of disease in any place should be equally applicable against its exportation.

4. All quarantinable diseases are chiefly introduced and propagated by the *material* of commerce; and it is therefore against it that quarantine restrictions should be instituted, and *not* against the *personnel*; excepting, however, persons with no evidence of vaccination, and known to have been exposed to small-pox; such persons shall be vaccinated as soon as

possible, and detained until the vaccinia shall have taken effect; otherwise they may be detained fourteen days from the time of the known exposure.

5. The application of quarantine regulations shall be regulated by the official declaration of the constituted sanitary authority at the port of departure where the malady exists. The cessation of these measures shall be determined by a like declaration that the malady has ceased—after, however, the expiration of a fixed delay of thirty days for the plague, fifteen days for yellow fever, and ten days for cholera.

6. It is obligatory on all vessels to have a *BILL OF HEALTH*; this shall consist of two kinds only, a *clean bill* and a *gross bill*—the first for the attested absence of disease, and the second for the attested presence of disease. The bill shall state the hygienic state of the vessel; and a vessel in a bad condition, even with a clean bill of health, shall be regarded as a vessel having a gross bill, and shall be submitted to the same regime.

7. The plague, yellow fever, and cholera being the only maladies that entail general measures, and place in quarantine those places whence they proceed, the restrictions enforced against these diseases shall not be applied to any other suspected or diseased vessel.

8. The power of applying the general principles of this code, and of acceding to its provisions, are expressly reserved to those nations and governments who consent to accept the obligations it imposes; and all the administrative measures proceeding from it shall be determined by international sanitary regulations, or by a convention of the representatives of the governments which have adopted it.

9. This code shall continue in force and vigor among the governments adopting it for five years, and it shall be the duty of any party wishing to withdraw from its observance, at the end of that time to officially declare his intention six months before the term expires; if there be no such notice, the code shall be regarded as in force one year longer, and thus it shall continue year after year, with all the governments accepting it, until after due notice, six months before withdrawal.

PROVISIONS IN DETAIL.

I.—MEASURES RELATING TO DEPARTURE.

10. Measures relating to departure comprise observation, inspection, and the ascertaining of the sanitary state of the place and vicinity; the examination and ascertaining of the hygienic state of the vessel which is about leaving, of its cargo and provisions, of the health of the crew, and, if there are any passengers, of their health also; and lastly, of the bill of health, and all relating thereto. These observations, inspections, and examinations shall be confined to the authorities hereinafter designated.

11. All vessels before lading, must be visited by a delegate of the sanitary authority, who shall be a doctor of medicine, and submit to hygienic measures, if deemed necessary. The vessel shall be visited in all her parts, and her hygienic state ascertained. The authority shall inquire into the state of the provisions and beverages, in particular of the potable water and the means of preserving it; he shall also inquire into the state of the crew, and in general into every thing relating to the maintenance of health on board. If any person has been shipped, having a transmissible disease, such person shall be forthwith discarded.

12. Charges shall not be made until after the visit, and the accomplishment of the measures judged indispensable by the sanitary authority.

13. Captains and masters shall furnish to the sanitary authority all the information and all the evidence, to the best of their knowledge, demanded of them. If the sanitary authority judges necessary, and does not believe himself sufficiently informed by the captain or other persons in charge, he can proceed to a new visit, after the lading of the ship, in order to assure himself if all the prescribed hygienic measures have been observed.

14. These various visits shall be made without delay, and in such a manner as to avoid unnecessary loss to the ship.

15. Vessels carrying a foreign flag shall be visited by the sanitary authority, with the consul or consular agent of the nation to which the vessels belongs.

16. The number of passengers embarking on sailing vessels or steamers, the arrangement of their accommodations, and the quantity of provisions on board for the probable length of voyage shall be determined by the particular regulations of different governments adopting this code. But in no case should the number of individuals to be accommodated on board any vessel, or in any apartment provided for the accommodation of crew or passengers, exceed in ratio one individual to every four hundred cubic feet of air space, together with provision for effectual ventilation in all weathers.

17. Passenger vessels of whatever size, and all vessels carrying sixty persons, or a smaller number, including crew, shall furnish themselves with the necessary medicines and apparatus for the treatment of the most ordinary diseases and accidents likely to happen on board. And it shall be the duty of the sanitary administration of each government to make out a catalogue of the medicines and apparatus, and detailed instructions for their use on board all vessels of this class.

18. All sea-going passenger vessels, and all vessels having a larger number of persons on board than named in the last preceding article, shall carry a doctor of medicine, approved of by the sanitary authority.

19. Bills of health shall not hereafter be delivered until after the fulfillment of the regulations herein specified.

20. Vessels of the navy and revenue vessels shall not be subject to the preceding regulations.

21. In ordinary times, fishing-vessels, pilot-boats, vessels in the coasting trade, of the same country, and canals boats, need not carry a bill of health; the sanitary regulations of this class of vessels shall be determined by the local authorities.

22. No vessel shall have more than one bill of health.

23. Bills of health shall be delivered in the name of the local government by the sanitary authority, *viséd* by the consuls or commercial agents, and be of credit in the ports of all governments adopting this code.

24. The bill of health shall contain the name of the vessel, the name of the captain, or master, and the results of the examination, relating to the tonnage, merchandise, crew, and passengers; it shall state the exact sanitary condition of the place, the hygienic state of the ship, and whether there are any sick on board. In short, the bill shall contain all the information that can enlighten the sanitary authority of the port of destination, to give him as exact an idea as possible of the public health at the place of departure and environs; of the state of the ship, her

cargo, the health of the crew and passengers. The environs are those places in habitual communication with the port of departure, and possessing the same sanitary relations.

25. Whenever there prevails at the place of departure, or in its environs, one of the three maladies reputed to be importable or transmissible, and when the sanitary authority shall have declared its existence, the bill shall give the date of the declaration. It shall give the date of the cessation of the same when the cessation shall have been established.

26. In conformity to the provisions of article 6, the bill of health must be either *Clean* or *Gross*. The sanitary authority shall always pronounce upon the existence or non-existence of disease at the port of departure. Doubtful cases shall be interpreted in the most prudent sense—and the bill shall be gross. In regard to passengers, for those whose health may be suspected, the sanitary authority may demand the certificate of a doctor of medicine, known to him to be of good standing, and if any proposed passenger is thus found to be in a condition, comprising the health of the ship or of persons on board, he shall, upon the direction of the sanitary authority, be prohibited.

27. Bills of health can only be considered as valid when they have been delivered within the forty-eight hours last preceding departure. If the departure is delayed beyond this period, the bill must be *visé* by the authority delivering it, stating whatever change may have taken place.

28. The existence of transmissible or importable disease in the quarantine establishment of any place shall not alone be considered cause sufficient for a *gross* bill of health.

II.—SANITARY MEASURES DURING THE VOYAGE.

29. All vessels at sea shall be kept in a good state of ventilation and cleanliness. And to this end it shall be the duty of the sanitary authority at the port of departure, to see that every vessel is provided with the necessary means, and that captains and masters are sufficiently conversant with the use of those means, for the purposes indicated.

30. Captains and masters shall conform to the instructions of the sanitary authority; otherwise, on arriving, they shall be considered as having a *gross* bill of health, and be treated accordingly.

31. Physicians attached to sea-going vessels shall be considered as the agents of the sanitary authority, and it shall be their special mission to watch the health of the crew and passengers, to see that the rules of hygiene are observed, and, on the arrival of the vessel, to give an account of the circumstances of the voyage. They must also keep an exact record of all circumstances of interest to the public health, meteorological observations, etc., and note with particular care the history and treatment of all the diseases and accidents that occur.

32. In vessels carrying no physician, it shall be the duty of the master or captain to fulfill, as far as practicable, the obligations of the last preceding article.

33. All captains or masters touching at or communicating with a port, shall have their bills of health *visé* by the sanitary authority; or, in default of such authority, by the delegated officer of the local police.

34. It is forbidden to the sanitary authority at the port where a vessel touches, or holds communication, to retain the bill of health given at the port of departure.

35. In cases of death at sea from a disease of a suspected character, the wearing apparel and bedding which have been used by the deceased in the course of his sickness, shall be burnt if the ship is at anchor; if *en route*, thrown into the sea, with the necessary precaution that they shall not float. Other articles belonging to the deceased shall be immediately aired or otherwise purified.

III.—SANITARY MEASURES ON ARRIVAL.

36. All vessels on arrival shall submit to an examination and questioning. The examination and questioning shall be made by the sanitary authority delegated for that purpose; and the result shall be recorded upon a special register.

37. All vessels, furnished with a clean bill of health, which have had during the voyage no disease or communication of a suspected nature, and which present a satisfactory hygienic condition, shall be admitted to free *pratique* immediately after examination.

38. There being no evidence that any disease was ever introduced into a community by persons who had been quite healthy during the voyage, and were so on arrival, such persons should not be detained under the apprehension that disease may be dormant in their systems. All well persons shall be allowed free *pratique*, excepting only the temporary delay provided in article 4 for smallpox, immediately after arrival.

39. Whenever there are sick on board, they shall be removed as promptly as possible from the vessel to clean and airy rooms on shore, or to a floating hospital moored in a healthy situation. The detention of such persons in an infected ship is obviously most objectionable, and should be allowed under no circumstances whatever.

40. The experience of quarantine shows that the fears of pestilential disease being introduced by the ordinary cargoes of dry and imperishable goods is groundless, and that with the temporary exceptions hereinafter provided, such cargoes shall be admitted to free *pratique* immediately after examination. Nevertheless, there are numerous articles of commerce which should not be landed except under special restrictions, and apart from all populous neighborhoods.

41. The application of sanitary measures to merchandise shall be arranged in three classes:—1. Merchandise to be submitted to an obligatory quarantine and to purification; 2. Merchandise subject to an optional quarantine; and 3. Merchandise exempt from quarantine.

The 1st class comprises clothing, bedding, personal baggage, and dunnage, rags, paper, paper-rags, hides, skins, feathers, hair, and all other remains of animals, woolens, and silks

The 2d class comprehends cotton, linen, and hemp; and *cattle*.

The 3d class comprehends all merchandise not enumerated in the other two classes.

42. With a *gross bill* and existing quarantinable disease on board, or if there has been any such disease on board within the ten days last preceding, merchandise of the *first* class shall always be landed at the quarantine warehouse or other place provided, distant at least two miles from all populous neighborhoods, and there submitted to the necessary measures for purification. Merchandise of the *second* class may be admitted to free *pratique* immediately, or transferred to the warehouse, according to circumstances, at the option of the sanitary authority, with

due regard to the sanitary regulations of the port. Merchandise of the *third* class shall be declared free and admitted without unnecessary delay.

43. In all cases of a gross bill, letters and papers shall be submitted to the usual purifications; but articles of merchandise, or other things not subject to purifying measures, in an envelop officially sealed, shall immediately be admitted to free *pratique*, whatever may be the bill of health. And if the envelop is of a substance considered as optional, its admission shall be equally optional.

44. A foul ship is much more to be dreaded, as a vehicle of introducing disease, than anything she has on board; and vessels in a filthy, unwholesome state, whether there has been sickness on board or not, should not be allowed to enter a crowded port, or to lie alongside a wharf or other ships, until they have been broken out, duly cleansed, and ventilated.

45. If a vessel, though furnished with a *clean* bill of health, and having had during the voyage no case of sickness, yet be found in a bad or infected state, or in a condition which the sanitary authority judges compromising to the public health, the vessel and cargo shall be detained until the case has been considered by the authority; his decision however, shall be rendered within twenty-four hours.

46. If in the judgment of the sanitary authority the vessel requires it, he may order the following hygienic measures:—Baths and other bodily care for the *personnel*, washing or disinfecting means for clothing; displacement of merchandise on board, or a complete breaking out; subjection to high steam, incineration or submersion at a distance, in the sea, of infected articles; the destruction of tainted or spoiled food or beverages; the complete ejection of water; thorough cleansing of the hold, and the disinfection of the *well*; in short, the complete airing and ventilation of the vessel in all her parts, by the use of force-pumps, steam, fumigation, washing, rubbing, or scraping, and finally sending to an isolated anchorage ground. Whenever these divers operations are deemed necessary, they shall be executed in the more or less complete isolation of the vessel, according to circumstances, but always before admission to free *pratique*.

47. All vessels having no bill of health, which, by reason of the place from whence they came, could not obtain one, or in case of accidental loss of bill, shall submit to restrictions according to circumstances, depending upon the judgment of the sanitary authority, in conformity with the provisions herein established.

48. All bills showing evidence of erasure or alteration shall be considered null, and shall incur the conditions of the last preceding article, without prejudice to the proceedings which may be instituted against the authors of the alterations.

49. A doubtful case, reported in an unsatisfactory manner, shall always be interpreted in the most prudent sense. The vessel shall be provisionally detained.

50. Admission to free *pratique* shall be preceded by as many visits to the vessel as the sanitary authority may judge necessary.

51. No vessel can be put in quarantine, without a stated decision of the sanitary authority. The captain or master of the vessel shall be informed immediately after of this decision.

52. A vessel shall have the right, except when they have plague, yellow fever, or cholera on board, of putting to sea, in preference to being

quarantined; and in the exercise of this right, if the vessel has not arrived at the port of destination, the bill of health shall be returned; the sanitary authority, however, shall mention upon such bill the length and circumstances of the detention, also the condition of the vessel on reputting to sea. But before the exercise of this right, the sanitary authority must assure himself that the sick will be taken care of for the remainder of the voyage; and take charge of such of the sick as prefer to remain.

53. Besides the specific measures in the foregoing regulations, the sanitary authority of each country or port has the right, according to article 1, in the presence of immediate danger, to take the responsibility of applying such additional measures as may be deemed indispensable for the protection of public health.

54. Notwithstanding the preceding regulations, whenever the sanitary state is positively healthy, vessels going from one port to another in the same country can, in virtue of the particular sanitary regulations of each country, be freed from sanitary examinations. And, in ordinary times, by virtue of declarations exchanged between the contracting nations, all vessels, proceeding or intending to proceed from one of two countries to the ports of the other, may also be free from examination.

IV.—EXECUTIVE ARRANGEMENTS.

55. Every seaport town requiring the obligations of quarantine, should have a quarantine hospital for sick persons, warehouses for infected goods, with the necessary docks, and a designated anchorage ground for infected vessels; these several parts of the establishment shall be at such a distance and direction from each other, and all populous neighborhoods, infections, and infectable places, as to endanger the life of no one.

56. On the arrival of infected vessels at the quarantine establishment, all well persons shall be admitted to free *pratique* as soon as possibly consistent with the foregoing regulations; sick persons shall be immediately transferred to the quarantine hospital, or to hospital ships, and the vessel unladen as soon as practicable. All merchandise shall be placed in capacious and perfectly secure warehouses, and there freely exposed to the air, and moved from time to time to insure its perfect ventilation.

57. Merchandise coming from different vessels and places in quarantine, at different times, shall be kept separate, and placed as much as possible in different warehouses.

58. Merchandise of the first class (Art. 41) shall be submitted to such measures of purification as the sanitary authority shall judge necessary. No putrified animal or vegetable substances, or substances likely to putrify, shall be admitted into the warehouse. All such substances shall be rendered innocuous or destroyed.

59. The clothes and dunnage of passengers contaminated with the infection of different diseases shall be exposed to ventilation in different places.

60. Each quarantine establishment shall have one or more warehouses specially appropriated to the reception of purified merchandise, to which all merchandise may be removed so soon as it shall be deemed by the sanitary authority admissible to *pratique*.

61. Letters or dispatches shall be so purified that the writing may not be effected. Consuls and representatives of foreign countries have the

right to be present at the opening and purification of letter-bags or other mail packages addressed to them or designed for their country. Post-masters shall have the same right as consuls and foreign representatives.

62. All governments and places adopting this code shall, as soon as practicable, provide the necessary arrangements and appurtenances for fulfilling the obligations it imposes.

63. In case of the arrival of infected vessels at a port not provided with a quarantine establishment, vessels or hulks may be appropriated to the service of the sick, and also for the reception of merchandise; but in such cases they shall be disposed in such a manner as will permit the separation of the sick and assure the best conditions of hygiene, especially ventilation. But under no circumstances whatever shall sick persons be kept in proximity with infected goods. Well persons shall have their liberties as soon as practicable, consistent with the preceding regulations; and all other measures essential for the protection of public health, shall be instituted according to the exigencies of the case, provided they are not inconsistent with the tenor and spirit of these regulations.

V.—SANITARY AUTHORITIES.

64. Sanitary authorities shall be established upon a uniform basis by the countries or governments adopting this code, and shall be composed, first, of a responsible agent of the government, who shall be a doctor of medicine; and, second, of a local sanitary council or board of health.

In addition to the above report, presuming it to be adopted, your committee beg leave to offer the following resolutions:—

Resolved, That this report be referred back to the committee, with directions to negotiate with our National Government, or Department of State, to secure, by convention or otherwise, the national and international adoption of a code based upon the principles hereinbefore set forth.

Resolved, That a committee of one from each State represented in this convention be designated by the delegates of the several States, and appointed by the chairman of the convention, with power to confer with the governments of their respective States for the adoption of such code.*

Resolved, That the local sanitary authorities of the several States and municipalities in the United States be furnished with a copy of this report, and that they are hereby respectfully requested to carry into effect all its specific recommendations, and the general provisions of the code, without waiting for their national and international adoption.

Respectfully submitted,

A. N. BELL, *Chairman*,
ELISHA HARRIS,
WILSON JEWELL,
R. D. ARNOLD,†
H. G. CLARK.

* By vote of the convention, it was Resolved, "That the Committee on External Hygiene have power and be directed to select a suitable person from each State not represented in this convention to aid in carrying out the objects of the second resolution of their report." The following persons were appointed from the States represented:—Gov. Emerson, of Penn.; Dr. Gunn, N. Y.; Dr. Snow, R. I.; Dr. Moriarty, Mass.; Dr. J. A. Nichols, N. J.; Dr. G. B. Guthrie, Tenn.; Dr. Thompson, Ohio; Dr. Kemp, Md.

† It was voted, on motion of the chairman of the committee submitting the report on External Hygiene, "that two additional members, appointed by the chair, should be added to that committee. Drs. R. D. Arnold and H. G. Clark were appointed.

Art. II.—RECIPROCITY—UNITED STATES AND CANADA.

THE Hon. Israel T. Hatch having made a report to the Treasury Department adverse to the reciprocity treaty between the United States and Canada, and a report was made by Mr. Taylor to the same department in a contrary sense, the Committee of the Oswego Board of Trade has made a report sustaining Mr. Taylor, by its chairman, Alvin Bronson, proceeding as follows:—

Before entering upon the discussion of this treaty, a brief allusion to the former commercial relations of Great Britain and the United States, will be appropriate.

The famous Navigation Laws of Great Britain are familiar to commercial men. Their origin was in 1651; their object, the monopoly of her own trade and that of her colonies, to the exclusion of all other nations. By their operation she drove Holland, her principal rival, from the ocean during the last century; and when by treaty she acknowledged our independence, she applied the system to us in all its rigor, subsequently modified a little by an occasional treaty, relaxed and enforced by orders in council, as the exigencies of war, famine, or plenty dictated. Her utmost skill was exerted to cripple and restrict our trade, and ours to counteract and defeat her measures. We followed her enactments step by step, by retaliation and sharp reprisal, down to 1849, when, instead of driving us from the ocean, as had been the fate of Holland, we had, under this damaging warfare, well nigh divided the trade of the world with her, having at the present time equal tonnage with the mistress of the seas.

In 1849, Sir Robert Peel swept these ancient and odious Navigation Laws from the British statutes, with the exception of some slight remnants. Our retaliating measures fell with them—we having enacted a law in the early part of the present century, tendering reciprocal free trade to all, and under it had formed treaties of commerce with several European nations.

Sir Robert yielded this conflict in the most gracious manner possible. While abrogating her Navigation Laws and her long-cherished Corn Laws, Great Britain opened her ports to the admission of most of the raw materials for manufactures, and all agricultural products, free of duty, other than nominal duties to preserve a record of trade; demanding no equivalent, and stipulating for no relaxation of restrictions or duties in return for this boon.

Another commercial movement in the same direction preceded this two years. In 1847, Great Britain withdrew her protection of the trade and her pupilage over her North American colonies, withholding her bounty or discriminating duty on colonial products, and on trade through the St. Lawrence, with the exception of square timber, (which till the last year enjoyed a greatly diminished bounty or protection, now wholly withdrawn;) Canada was left free to regulate her own trade, and construct her own tariff. Availing herself of her newly-acquired power, she raised the duty on British manufactures from 5 to 7½ per cent, and reduced duties on our manufactures from 12 to 7½ per cent, thus abolishing differential duties. She also tendered us by legislation reciprocal free trade in all the commodities of the two countries, which we did not accept.

Such was the condition of things in Great Britain and her American colonies, and such our relations with both in 1854, when the treaty of reciprocity was negotiated and ratified, each province being a party and ratifying for itself.

This treaty provides for the free navigation of the St. Lawrence, Lake Michigan, and the canals of Canada; abrogates the restrictions on the fisheries, and exempts from duty the following natural products, viz., of the sea, of mines, of the forest, of animals and their products, and of the soil.

It is not alleged, so far as regards the free articles of the schedule, that the treaty has not been carried out in good faith by all parties; but Mr. Hatch avers that it has been violated in spirit and letter by Canada, in her tariff of duties on our manufactures, and on foreign products which she has been accustomed to purchase in our markets, and also in circumventing our Debenture Laws, and in thwarting our restrictions on lake coasters. Your committee will address themselves to these infractions of the treaty before they examine its working and its merits.

TREATY VIOLATED.

Mr. Hatch says a treaty broken is a treaty no longer; and proceeds to show that Canada has violated this treaty by raising her tariff of duties on our manufactures, (from 12 to an average of 16 per cent according to Mr. Taylor,) and also by protective and discriminating duties, intended to shut out our manufactures from her markets, and divert our trade from its accustomed channels. This being the great feature of his report, has been sedulously labored and skillfully elaborated through many pages of the work.

Canada, like the State of New York, has embarked in an expensive system of canals, without much regard to revenue. Both parties and both systems were avowed rivals and competitors for the same trade, viz., the trade of each other and the trade of the West beyond and remote from both. New York in this sharp competition has embarrassed herself, and has been driven for relief to direct taxation; but for the Federal Government standing in her way, she would have sought this relief in the more secret and insidious method of taxing imports and consumption.

Canada has even outdone us in extravagance and improvidence, and has well nigh swamped herself; not only by her unproductive canals, but she too, like ourselves, has committed the folly of subsidizing her railroads; not like us, to the tune of three or four, but twenty millions, and all hopelessly sunk.

She must seek relief in revenue or repudiation. More fortunate than New York, the Imperial Government having left the door wide open for indirect taxation, she has taken a leaf from our federal book, and imposed taxes on imported manufactures and other products, almost as heavy as our federal impositions. Hers average, according to Mr. Taylor, 16, while ours average 21 per cent, ours being still some 25 per cent higher than hers. She has also copied another feature from our book—that of protection to domestic industry, to render herself independent of both Old and New England.

Of her revenue tariff, prompted by poverty, we have no right to complain. Protection is a problem for her to solve. Whether it is wise for

a young people, like Canada, with illimitable forests, an ample and growing market at her door for her sawed lumber, and an unlimited market across the ocean for her squared timber, with a soil productive of bread, and in England and the Lower Colonies an ample market, whether it reaches them through the Hudson or the St. Lawrence; with labor dear and capital scarce; whether it is wise for such a people to seek a change of industry by copying from Old or even New England, time must demonstrate.

Mr. Hatch not only charges the infraction of the treaty upon this tariff, but represents it as a breach of faith, an act of ingratitude after receiving the benefits of the treaty, and a great wrong inflicted upon us.

It should be recollected that Canada suddenly awoke from her splendid dream of monopoly to find herself loaded with a debt of fifty millions of dollars, sixteen of which was sunk in the crowning folly of the Grand Trunk Railway; with an annual deficit of four millions of revenue. It matters little to us whether she imposes this deficit upon her consumption, including our manufactures and those of Great Britain, or whether she raises the required revenue by direct taxation; both impoverish her alike, and lessen her ability to purchase and consume our products. But Mr. Hatch presses this grievous wrong and imposition into his service with skill and industry, reiterates the charge with every variety of expression, such as "taxing our labor to build works to rival and rob us of our commerce;" "by imposing extraordinary taxes upon the products of American industry, she is compelling us to bear her burdens, created to sustain gigantic rivalries, worthy of imperial ambition, for supremacy by land and water over our inland commerce, and for the grave influence which thus may be exercised upon our political career," leaving the impression that we are a greatly injured nation, and that, too, by a people on whom we have just bestowed boundless benefits.

In pushing his complaints so far, he has betrayed Mr. Ely into the avowal, in his Congressional speech, *that we pay these duties, not Canada.*

The plain English of all this declamation is, that Canada takes three or four millions of our fabrics and products for consumption, imposing upon herself, through her tariff, a heavy duty.

England, too, is subjected to the same imposition and the same suffering, and bears it with becoming equanimity, and would willingly relieve "the fruits of our industry," as Mr. Hatch has it, from these impositions, by furnishing these three or four millions herself, to be taxed as best suits the interests or theories of Canada.

We desire to treat Mr. Hatch with the respect due to his talents and his position, but if he will indulge in clap-trap he must not ask us to treat it with the gravity of an argument.

If it is a great wrong to impose duties on our manufactures, it must be right to protect and fabricate them for herself; yet here, too, Mr. Hatch finds a fruitful topic of complaint. Here lies the sum and substance of the infraction of the treaty. The parties agree to exchange bread and meat without duty, and forthwith Canada raises her duty on cotton fabrics and whisky, which were not embraced in the free schedule.

Had Mr. Morrel's bill passed Congress, raising duties and imposing specific and protective duties on similar articles, we, too, should have come under Mr. Hatch's charge of treaty breakers.

Although a union exists between Canada East and Canada West, there

is not harmony. The Lower Province found, when the staple and other natural products of Upper Canada were relieved from duty, and from the formalities and expenses of our debenture bonds, that a strong impulse was given to her trade with us, and through us with the Lower Provinces and Great Britain. To counteract this tendency, and force her trade and allure ours to the St. Lawrence, the undue power of Lower Canada, which was paramount in the union, was called into requisition, and arrayed against Canada West and our channels of trade. The gratuitous use of her locks and canals was tendered to the trade of the St. Lawrence, and her discriminating duties were shaped to promote it. This legislation, unfriendly and unwise, as your committee believe, has well nigh proved abortive. The Montreal *Herald* reports the arrival to September 27th, 1854, (the first year of reciprocity,) 253 vessels, tonnage 71,072; and in 1860, 140 vessels, tonnage 82,460, and this is the port at which the provincial trade centers, with the exception of the timber trade of Quebec; no more than a natural increase of trade without the effect of discrimination.

Mr. Hatch's remedy, or retaliation for this hostility from one-half of one of these five contracting parties is, to abrogate the treaty with all; revive our duties; retire from the St. Lawrence; withdraw our debenture facilities from Upper Canada, and thus *compel* her to trade through the St. Lawrence, playing into the hands of Lower Canada; a system of non-intercourse, which would reduce a trade of more than forty to less than ten millions again.

We cannot, in justice to our citizens and our creditors, counteract these measures by the gratuitous use of our locks and canals; but your committee believe sound wisdom dictates that we cherish free trade with all the provinces; counteract their protective and discriminating policy by continued and increased facilities in our own, and to other markets through our channels. We would drive them from the forge and the anvil, to the forest and the saw mill, by buying their boards; and from the spindle and loom, to the plow, by transporting its products through the cheapest channel to the best market. A little patience and good temper on our part will set all right.

Canada West, with her fine climate, rich soil, and commercial capabilities, will grow populous and rich, and soon assert and maintain her rights, and under a liberal and just policy minister largely to our prosperity. She is already taking efficient measures to reform the government and secure the power due to her population.

CANAL AND RAILWAY RIVALRY.

Mr. Hatch inculcates the theory with zeal and industry, that the two Canadas, the British capitalist, and the imperial government, have combined to monopolize the trade of the Far West, by means of canals and railroads, without regard to income or profit.

The same theory has been widely propagated by our railroads, and great merit claimed for counteracting this gigantic monopoly. Mr. Hatch says, page 34:—"The changes to be produced by this grasping monopoly will be developed with the rapidity characteristic of modern times. They will include the whole system of our commercial industry."

Again, page 35, "This vast commercial struggle, where monopoly is the end to be gained, must terminate in a colossal combination of Amer-

ican capital and ability, or the field must be abandoned to their royal rival." Here we have eloquent declamation to propagate a bald fiction.

Canada, one of the British provinces, has inaugurated a system of canals with her own means and her own credit, "out of all proportion to her wants," as Mr. Hatch avers, looking to the trade of the West.

New York, one of the United States, has done precisely the same thing; the magnitude of her works is out of all proportion to her wants. The railroads of both Canada and New York are constructed and managed by private capitalists, and both upon the same scale, and looking to the Far West for patronage; the New York roads subsidized moderately, and the Canadian largely, by the local governments. All were gainful schemes; many have proved delusive ones; none have been prompted by politics or patriotism. It is believed that more British capital is embarked in our railroads and canals, seeking Western trade, than in similar Canadian works.

The British Government constructed the Rideau Canal, 127 miles in length, soon after the war, from her military chest; it is in no sense a rival for trade. The Commissioners of the Board of Works say in their report, December, 1859, page 23, that "the work was handed over to this department in a dilapidated condition, demanding a large expenditure of money; that its revenues are derived chiefly from local traffic, lumber, iron ore," &c. Herein is comprised the much bruted royal monopoly, the imperial prodigality to ruin our trade and drive us from the field.

It should be remembered, if all these fears are realized; if British capital could be enlisted to build and maintain roads and canals, and tender them to commerce gratuitously, and thus furnish the cheap channel for trade between the Atlantic and the lakes, even then the *major* interest of the lake region would be promoted—the *minor* interest only injured. The agriculturist, the great producer and consumer, would enjoy this bounty, this free road to market, while the defeated lines of commerce would suffer a diminution of patronage, and be compelled to turn over their supernumeraries to the more favored occupation.

The Rochester boat-builder and the Buffalo and Oswego boatmen must turn farmers, but the lake coaster would still pursue the trade to Montreal and Quebec, and the Atlantic ship would compete for it at Quebec and Portland. New York city might suffer, but Detroit and Milwaukee need not be alarmed. The day for protection and monopoly has gone by. The Grand Trunk, with its magnificent and alarming proportions, must sustain itself or sink. Canada is paralyzed, and cannot come to its relief. British capital will no longer bear depleting, and Great Britain, under a revised and liberal policy, has secured a large share of the trade of our continent, and cares not whether it reaches her through the St. Lawrence, the Hudson, or the Chesapeake; knowing, as she does, that the more numerous its competing channels, the more they minister to the prosperity of herself and her colonies.

The Montreal *Witness*, in a recent issue, says:—"The affairs of the Grand Trunk Railway appear to be approaching a crisis, and it is generally anticipated that the whole concern will have to be sold for debt." The same article attributes its misfortunes to bad and corrupt management, and they might have added appropriately, from Mr. Hatch's report, that they transported flour from the Mississippi to Portland for prices fabulously low.

In discussing the merits and working of the treaty, the following heads may be disposed of briefly, as it is believed nobody complains of them but Mr. Hatch, viz., the Fisheries, the St. Lawrence, Animals, and Minerals.

In relation to the fisheries, all will admit that a subject of national disquietude has been disposed of. A branch of industry, though regulated by treaty, demanding to be watched over by the men-of-war of both contracting parties, was troublesome and dangerous. The duty of this hostile armament was to keep the fisherman to the prescribed line in pursuit of his game, which line was on the ocean at a definite number of leagues or miles from headlands and bays. A better contrivance to embroil friendly nations in war could not have been devised by the wit of man. It matters but little who catch the fish, provided the consumer can have them at a cheap rate, free from duty. As a school for seamen, its effects are neutralized, when each maritime nation protects its own fisheries.

Of the St. Lawrence, while exclusively navigated by Great Britain, it has been the fashion to disparage its value and importance, on account of its high latitude, environed and crowded by islands, ice-bound and befogged for half the year. But since we have acquired a right to this channel by treaty, by abrogation of the English Navigation Laws, and by modern international law, as expounded at Vienna by the Congress of Sovereigns in 1815, it is pertinent to inquire whether it is as worthless as Mr. Hatch and his coadjutors would make it. The American lakes and their outlet occupy a section of that belt which carries forward the entire commerce of the globe; their latitude not as high as that of the English Islands, or the Baltic Sea. The navigation of Ontario and the St. Lawrence is *practicable* as long as that of the Hudson, and is *safe and profitable* for the same period of the year, as that of Lake Erie and the Erie Canal. The summer temperature of the North invites and allures the traffic of the valleys of the lakes, and the Upper Mississippi, through the Gulf of St. Lawrence, while the fervid heat of the South repels this trade through the Gulf of Mexico. Winter reverses this traffic. Nature has established reciprocity among all the channels of commerce, and forbids our impeding any by selfish and hostile enactments.

For most of the period since we became a nation, Quebec has been the field of more traffic, and the resort of more foreign tonnage, than any other port on the continent. When the St. Lawrence was improved at great expense, the inland and coasting trade alone was provided for. It is estimated by the Board of Works that another foot of water may be obtained through this channel at the moderate cost of a million of dollars, conforming it in depth to the Welland Canal, greatly promoting the lake and Atlantic trade, and rendering it far more effective than the gratuitous use of locks. It cannot be doubted that with its slight improvement, and some modification in the structure of our lake coasters, a large amount of tonnage will seek the Atlantic markets through this channel, during the summer, as regular traders, and a much larger amount, as winter approaches, to secure occupation in milder climates. But monopoly is inhibited by climate to any and all routes.

The *Detroit Tribune*, in a late issue, gives a list of lake coasters seeking the Atlantic for employment, comprising ten barks, five brigs, forty-one schooners, one propeller, and eight tugs within the last two years;

total tonnage of all, except the tugs, 18,085 tons. Two of the barks and one schooner are Canadian vessels. Two of the schooners only have been wrecked.

Total entries of sea-going vessels for Canada, inwards and outwards, for the year 1859, British, colonial, and foreign vessels included, number 3,333; tonnage, 1,282,233 tons.

Of animals and their products, it will be sufficient to say, that the exchanges between Canada and ourselves seem to balance each other with remarkable accuracy. We copy from Mr. Hatch's tables:—

IMPORTED INTO CANADA.		IMPORTED INTO UNITED STATES.	
1856.....	\$2,896,838	1856.....	\$2,875,888
1857.....	2,134,339	1857.....	1,974,516
1858.....	1,464,873	1858.....	2,281,786
Total.....	\$6,496,050	Total.....	\$6,581,690

In this trade there seems to be sufficient reciprocity to satisfy the most captious.

MINERALS.

Your committee are not aware that any other minerals than coal are exchanged under the treaty. We subjoin the amount of imports and exports for the last three years of the treaty:—

IMPORTED INTO CANADA.		IMPORTED INTO UNITED STATES.	
1856.....	\$448,984	1856.....	\$84,228
1857.....	509,494	1857.....	189,894
1858.....	324,374	1858.....	98,405
Total.....	\$1,322,852	Total.....	\$367,527

Here we find three-and-one-half times as much coal exported to Canada from the mines of Pennsylvania, Ohio, and perhaps Northern Virginia, as are imported from England and Nova Scotia to our Atlantic ports. Yet Mr. Hatch would invoke from the federal government a protective and prohibitory duty on this diminutive quantity of coal; thereby enhancing its cost, and stinting the supply to New England of an article of prime necessity in her rigorous climate, denuded of timber, and destitute of this mineral, so important an element in her manufacturing industry. Mr. Hatch insists that we may impose these duties on our citizens without any fear of similar impositions by Canada on hers. He says, she, too, has a rigid climate, her forests are fast disappearing, her minerals are all metals, and demand our coal for smelting them; and it would have been in harmony with his report, if he had added her future great manufacturing cities, which are to grow up under protective fostering, must have coal. And, by the bye, it occurs to us to inquire how New England, with her fuel heavily taxed, is to compete with Canadian manufactures protected by a provident and paternal government. How is she to furnish the "fruits of her industry," as Mr. Hatch has it, cheap enough to bear Canadian taxation?

This treaty, in minerals, works in this wise:—We import into New England, \$120,000 worth of coal per annum. The Federal Government loses duty, probably on half this amount, or 20 per cent on \$60,000, being \$12,000 per annum, while we open a trade in coal through the canals and railroads of New York, Pennsylvania, and Ohio, of nearly half a

million annually, yielding large revenues to these States, and profitable occupation to their citizens. Pennsylvania coal is now competing at Montreal with that of Liverpool and Nova Scotia, aided by the gratuitous use of the St. Lawrence locks.

PRODUCTS OF THE SOIL AND THE FOREST.

These features of the treaty demand a more elaborate discussion, from the doubts entertained of their utility, and the opposition provoked by them to its ratification, and also from the hostile attacks upon them since it has been in operation.

Of breadstuffs, the staple of both Canada West and of the States bordering on the lakes, their exchange generally does not involve the question of *revenue* or *consumption*, it is merely a question of commerce or transportation.

Two countries contiguous to each other, producing a surplus of the same commodity, will, when not impeded by artificial means, seek the same markets for this surplus, and through the cheapest channels. Hence, if our entire crop should seek a foreign market through the St. Lawrence, it would in no manner depress or impair the value of the Canada crop. If a single barrel of our flour or many barrels should fall into their consumption, another barrel or an equal number of barrels of provincial flour would take their place and seek a foreign market. So again, if the Canadian surplus should seek a foreign market through the Hudson, it would, in no manner, affect our farmers or our revenue. All the clamor, therefore, about the Canadians overwhelming us with breadstuffs, ruining our markets, running a muck with our farmers, taking the bread out of their mouths, and our "carrying coals to Newcastle" when our flour goes to Canada, is idle declamation, mere clap-trap. The truth is, those who provide the best channel for these surpluses, partake most largely of the benefits of the treaty, and minister most to the prosperity of the producer, whether a subject of the queen or a citizen of the republic.

Here we might quote Mr. Hatch, who, in his zeal to establish the inequality of the treaty, has unwittingly admitted and affirmed its equality and reciprocal working.

Page 24, Mr. Hatch says:—"As Canada produces more wheat and flour than she can use, our shipments to her are not made for consumption, but must compel the return of the same or an equivalent to us, chiefly in a manufactured condition, at the expense of the milling interests of this country, or its shipment to Europe in foreign vessels, at the expense of our American bottoms." 'This is all true, but it happens to be but half the truth. As we, too, produce more wheat and flour than we can use, when Canadian wheat and flour come here, it is not for consumption, but must be returned, or its equivalent, chiefly in a manufactured condition, at the expense of the milling interests of Canada, or shipped to Nova Scotia, Great Britain, or elsewhere, mostly in American bottoms, at the expense of foreign vessels. Had Mr. Hatch completed the paragraph, and told the whole truth, he would have established our proposition. Thus far, our channels have enjoyed these benefits in a higher degree than those of Canada.

There are, however, some exceptions to the rule here laid down. One branch of this trade, and an important branch, that does not come under the head of transportation or of reciprocity, so far as breadstuffs are con-

cerned, is Indian corn and its products. During the year ending June 30, 1859, we exported to Canada, corn and its products comprising:—

Indian meal, lard, pork, hams, and bacon, of the aggregate value of...	\$1,180,878
Same articles to the other British American provinces	1,127,205
Together.....	\$2,308,078

This agricultural product goes into consumption, and is expended largely in their fisheries, lumbering, and shipping, and for the manufacture of whisky. This corn and its products go far toward the payment of our imports of the products of the forest; which in 1858, amounted to \$3,290,383—and this, too, is an article of consumption. An exchange as beneficial to both parties as an exchange of commodities between the tropics and the temperate zone.

Corn is produced in great abundance, and at small cost on the rich bottoms of the Ohio, the Wabash, and the Illinois, and matured by a warm climate before the frost overtakes it. While the pine lumber, a necessary article of consumption in building, fencing, and manufactures, is produced in a high latitude, on a sterile and cheap land.

On lumber, the Federal Government has sacrificed a small amount of revenue, while, by its freedom and expansion, New York has acquired a large canal revenue, and her citizens extensive and profitable occupation.

Our lake shipping share most largely in its transport, and our canals monopolize it.

There is still another exception to this rule, another portion of this exchange of breadstuffs which is reciprocal and goes into consumption. Canada East consumes largely of the spring wheat of Wisconsin and Illinois, taking it partly in the berry direct from these States, and partly in flour ground in the State of New York. She prefers this wheat to the fine article from Canada West, partly from habit and partly from economy. She has been accustomed to raise her full supply of this description of grain, but at times, from failure of crops and diminished culture, she probably draws half her supply for a population of a million from abroad. A cheap article, exempt from duty, has allured her to our prairie States for this supply. On the other hand, New England consumes largely of the fine wheat and flour of Canada West, since her accustomed supply of Genesee has failed, and since its exemption from duty has brought it within her reach.

From an exhibit of the trade and commerce of Toronto, (C. W.,) for 1859, we make the following extracts:—"The demand for our flour during the past year, has been from Montreal and Quebec for the lower grades, while for fancies and extras, purchases have been mainly made for Boston and other New England markets." Again, "The manufacturing districts of the New England States require a description of flour superior to any that has hitherto been produced in the West."

Of barley it says:—"Over 167,000 bushels have been exported the last year; the purchases for export were mainly with a view to the Albany market," (breweries.)

"The import of Indian corn at this point last year, for the manufacture of whisky, amounts to 143,524 bushels, valued at \$100,338." Here is reciprocity; with this difference, we obtain the best beverage.

Revive the duty of 20 per cent on bread, yielding but a paltry revenue

to the Federal Government, an extensive and beneficial trade would be broken up. Canada East would be compelled to eat a white and a dear loaf, while New England would have the alternative of a taxed loaf, or a brown one. Illinois and Wisconsin would flood their single market, already overstocked, with spring wheat. And here we may repeat the question, how is New England to compete with the protected manufactures of Canada, with her bread taxed, as well as her fuel? It is apparent that free trade in breadstuffs, a subject so fruitful of cavil and clamor, is not so barren of benefits as a superficial observer would imagine. Their exchange for consumption, so far as it goes, is highly beneficial to both parties, the remainder having the choice of the cheapest and best channel to a distant market, exempt from duty, and free from the formalities and expenses of our debenture system.

The free importation of Canada lumber is fraught with benefits to all. On our part, the carrier, the canals, and the consumer share largely and directly in these benefits, and the manufactures of New England and New York incidentally. Canada finds appropriate and profitable occupation in its preparation and transport, and derives from its sale an ample fund with which to purchase from us her agricultural implements, her building materials, and staple fabrics for consumption.

Your Committee are not familiar with the lumber trade on the seaboard, but observe in the statistics of trade that we export to the Lower British North American Provinces, pitch pine, locust, hickory, black walnut, and oak, which they do not produce; and it is believed that Maine finds some equivalent in the free use of the St. Johns River, for the competition of New Brunswick in the pine lumber trade.

Our debenture system Mr. Hatch treats as a proffered boon, rejected and thwarted by Canada. So far from a boon, its aim and object was to promote our carrying trade, by alluring to our Atlantic ports the products of other nations, to be again distributed to their respective markets, exempt from duty, other than a commission or tax of $2\frac{1}{2}$ per cent. Its operation was extended to Canada and New Mexico by act of Congress, August, 1846. Now, inasmuch as Lower Canada has endeavored, by discriminating duties and protective laws, to annul and counteract the operation of this debenture system, and force Canada West, as Mr. Hatch says, to import her tropical products by a circuit through the St. Lawrence, of a thousand miles, therefore he would annul the law, and *compel* Upper Canada to import and export through this circuitous channel, thus playing into the hands of Lower Canada, and yielding this valuable branch of the carrying trade.

We subjoin extracts from official tables of Canada "Trade and Navigation" for 1859, page 199:—

Imported through the United States under debenture bonds, in value.	\$4,546,491
Of which pays 25 per cent duty	\$28,652
" 20 and 15 per cent.....	4,278 287
" 10 and 5 per cent.....	120,547
Purchased in the United States, products of other countries	5,351,865
Foreign products.....	\$9,898,356
Products of United States.....	12,237,541
Of which pays 25 per cent duty.....	\$140,611
" 20 and 15 per cent duty.....	2,487,251
" 10 and 5 per cent duty.....	506,724
Free goods.....	8,040,225
Total imports.....	\$22,135,897

Of the foreign products, tea amounts to 5,825,052 pounds, of the value of \$2,071,339, which is imported from China in American bottoms, exported to Canada through our canals and railroads, yielding freight, warehouse charges, and mercantile profits. It is difficult to imagine a more suicidal measure than the one proposed by Mr. Hatch, of repealing the Debenture Laws, so far as they relate to Canada.

COASTING TRADE.

The only remaining subject of criticism and complaint is the international coasting trade. Mr. Hatch says:—"In this competition of shipping, American ship-owners run a race in fetters. The staple manufacture of Canada has long been that of ship building for exportation," &c. If this be so, the result tells well for the bottom and speed of the American ship-owner.

By referring again to report of the Canadian Board of Works, page 143, we find the tonnage of the lakes and St. Lawrence for 1859, divided as follows, viz.:—

American vessels, 1,206, tonnage.....	819,460
Canadian vessels, 329, tonnage.....	70,734

By referring again to report of "Trade and Navigation" of Canada for 1859, page 275, it appears that the coasting trade to and from 66 Canadian ports, is divided as follows:—

Entries inward and outward of American steam and sail vessels..	tonnage	4,682,894
" " " Canadian " "		2,353,936

(Ferries excluded.)

The British navigation laws forbid to American vessels the coasting trade of the British North American Provinces, while our retaliatory laws forbid to provincial vessels our coasting trade. All discriminating restrictions on direct trade between these provinces and the States have been removed, while coasting restrictions have been greatly modified and ameliorated.

We find in United States "Commercial Relations," vol. I., pages 56 and 57, the following remarks; after alluding to the restrictions on trade with the British West and East Indies, it says:—"With the North American provinces, however, a system of the most liberal and unrestricted character has been adopted, which, to a great extent, places commercial intercourse between the United States and these provinces on the footing of an unfettered coasting trade." Passenger vessels are allowed to land on the opposite coasts, from point to point; passengers with their baggage, family stores, implements of trade, &c.

Lake Ontario to a New York port, would be lawful, though the identical goods may have constituted the freight for both voyages, having passed from the upper to the lower lakes by a railway. The same license or latitude would be extended to an American bottom if similar cases should occur, which, from the nature of the trade, are not so frequent.

From the tenor of Mr. Hatch's argument, the impression is left on the general reader, that this is a violation of the spirit of the treaty, whereas, it is a mutual relaxation of coasting restrictions, a violation of the spirit of the British navigation laws, a remnant of barbarism two hundred years old—a remnant which it is believed every commercial man on either side of the lakes would be glad to see abolished; and it is a subject of regret that the treaty did not abolish this troublesome restriction, at least between us and British North America.

The growth and magnitude of our trade with these Provinces is so well known that it is not deemed necessary to load this report with figures and statistics. We only subjoin the aggregate of this trade at three distinct and well defined periods in its history. The first, 1830, when the British navigation and our retaliatory laws were in full operation. The second, 1840, when a relaxation of these measures, produced by Mr. McLane's negotiations, had operated for ten years; and the third, in 1855, when the debenture law had been in operation nine, and the treaty of reciprocity two years:—

1830, Imports from British North American Provinces.....		\$650,308
“ Exports to same.....		8,786,378
Total.....		\$4,436,676
1840, Imports.....	\$2,007,767	
“ Exports.....	6,093,250	
Total.....		\$8,101,017
1855, Imports from Canada.....	\$12,182,314	
“ “ other British N. Am. Provinces...	2,954,420	
Total imports.....		\$15,136,734
“ Exports to Canada.....	18,720,344	
“ “ other British N. Am. Provinces.....	9,085,676	
Total exports.....		\$27,806,020
Imports and exports total.....		\$42,942,754

It will be perceived that the amount of exports over imports are sufficient to satisfy those who deem the balance of trade an important element in commercial exchanges.

The discussion of canal and railroad rivalry, and the debenture and

enue we did enjoy before the treaty would, under augmented duties and multiplied restrictions, have dwindled to a mere bagatelle.

We have shown incidentally, that the small loss of revenue to the federal government on mineral and forest products has been restored many fold to the frontier States; that products of the soil in transitu would escape taxation under our debenture law. If New England could be made to yield to the federal treasury every fifth loaf of her Canada bread, and every fifth bushel of her Nova Scotia coal, it would not prove a financial achievement to excite much exultation. It is true, as Mr. Hatch avers, we have numerous custom-houses on the frontier, and he might have added on the seaboard also, attended with heavy expenses, and yielding little or no revenue. This is incident to our revenue system; one office collects revenue from the honest importer, while ten officers, with their cutters and numerous officials, are stationed as sentinels, not to collect, but to protect revenue by guarding against fraudulent importations.

We know of no other remedy for this evil on this frontier, than the adoption of the German Zollverein, which is said to be operating over a population of more 30,000,000. It is, in effect, like collecting the revenues of the lake frontier at Quebec and Portland, and distributing them per capita over the whole region; abolishing custom-houses by the hundred, and disbanding armies of public functionaries. Some of the most enlightened statesmen of Canada advocate this reform.

If our exposition of the terms and working of the treaty is a faithful one, it proves that there has been no infraction of it, that its benefits have proved reciprocal, that the unfriendly, and, as we believe, unwise legislation of Canada, has well nigh proved abortive, and will probably work its own cure. We would remove all coasting restrictions by legislation or by treaty. After this, if the contracting parties can devise other and better means of carrying on their governments than through the custom-house, then a system of perfect freedom and reciprocity of trade may be inaugurated; then British North America will yield to us all the benefits of federal States, without the tax and burthen of their government.

Widely different are the results of Mr. Hatch's labor; he finds a broken treaty, conferring great benefits on one party, and inflicting great injuries upon the other. In his zeal to make out a case, he has involved himself in numerous absurdities and contradictions. On the one hand he alarms us by an appalling conspiracy to monopolize the lake trade, and turn all through the St. Lawrence; on the other, scouts this navigation as worthless, and says Canada sends to our markets six times as much breadstuffs as the British, through this protected channel. He abuses Canada for "taxing the products of our industry," which means, when explained, for taxing herself when she consumes our fabrics, and still more, when she refuses to take them, and fabricates for herself. He berates her for overwhelming us and our markets with her products, and still more when she withholds and attempts to send them down the St. Lawrence, and that, too, by the gratuitous use of her locks. He complains that Canada West is obliged, by Provincial discriminating and specific duties, to import her tropical and other products through the St. Lawrence, by a circuit of a thousand miles, and at the same time proposes to withhold our debenture facilities, by the operation of which she can es-

cape this imposition and avoid this circuitous voyage. It would seem his commission does not restrict him to the exposure of abuses, but comprehends their cure also. For this purpose he would repeal the Debenture Laws, enforce the coasting restrictions, re-impose duties on the list of free goods, and that, too, perhaps through the agency of the Secretary of the Treasury, (as "a treaty broken is a treaty no longer,") without waiting the ten years prescribed by the treaty, or the action of the treaty-making power. He would retrace the path of commercial reform, go back a hundred years, to the age of restriction, retaliation, and non-intercourse, when two ships of different national character were required to perform the work of one, thus doubling the labor and cost of exchanging commodities.

Art. III.—COMMERCIAL AND INDUSTRIAL CITIES OF THE UNITED STATES.

NUMBER LXXVIII.

✓ BOSTON, MASSACHUSETTS.

INFLUENCE OF RAILROADS—POPULATION—VALUATION—MACHINE IMPROVEMENTS—CONCENTRATION
—BOSTON THE CENTER—INDUSTRIAL STATISTICS—EMPLOYMENT FOR WOMEN—ALL NEW ENGLAND
—NEW ENGLAND SOCIETY—ITS ORIGIN—OPERATIVES—SALES—SUSPENSION—RESUMPTION—EXTENSION OF BUSINESS—THE PAST YEAR—MANUFACTURING ACTIVITY—BOSTON SHIPPING LIST—MARKETS—SHIPPING—MILLS—THE COMING YEAR—FOOD AND MATERIALS—BOOTS AND SHOES—SHIPPING INTEREST—COTTON—DOMESTICS—FISH—FLOUR—GRAIN—WOOL—LEATHER.

THE annual reports of the trade of Boston show a considerable degree of prosperity, indicative of the concentration of business that is produced by the influence of railroads. The population and valuation of the city has been as follows:—

POPULATION AND VALUATION OF BOSTON.

	Population.	Valuation.		Population.	Valuation.
1800	24,987	\$15,095,700	1840	98,383	\$94,581,600
1810	33,787	18,450,600	1850	136,881	180,000,500
1820	43,298	38,289,200	1855	160,508	241,982,200
1830	61,392	59,586,000	1860	177,902	311,978,663

The valuation in the last ten years has increased \$131,900,000, and in the last five years the increase has been greater than the whole value of the city in 1830, up to which time the railroads had not come into operation, either in Boston or in those remote sections where of late such large markets for New England manufactures have grown up. The improvements in machines, and the concentration of capital in Boston, have, as it were, constantly attracted thither raw materials to be wrought up into goods, which, mingling with the New York importations, have found sale for Massachusetts labor in every section of the country to which rails penetrate. While the surrounding States have been large producers of the goods owned in and shipped from Boston, there has been apparently a constant concentration of labor in the city. The census returns of the industrial statistics of Boston, of which the following is a summary, show the number of establishments, amount of capital, value of articles used, and the yearly products in each ward:—

Wards.	No. estab-lishm'ts.	Capital employed.	Materials used.	Products.	Men.	Pay of men.	Women.	Pay of women.
1...	12	\$467,000	\$700,000	\$1,211,000	245	\$9,020	62	\$800
2...	53	1,802,000	2,620,000	4,669,000	1,908	52,890	11	185
3...	312	2,303,000	5,033,000	8,415,000	2,730	100,660	619	10,194
4...	218	2,484,000	3,474,000	7,258,000	2,599	78,430	2,160	34,341
5...	12	62,000	78,000	256,000	115	5,000	24	330
6...	43	120,000	341,000	509,000	260	8,500	2	25
7...	77	969,000	2,501,000	3,697,000	1,120	35,100	1,055	15,100
8...	69	839,000	573,000	1,979,000	727	37,000	208	4,505
9...	7	28,000	106,000	135,000	49	8,700	5	70
10...	62	374,000	365,000	833,000	535	18,000	29	384
11...	30	730,000	558,000	2,270,000	737	49,000	78	1,566
12...	42	2,617,000	3,473,000	6,710,000	2,385	69,400	56	904
Total.	931	\$12,845,000	\$19,852,000	\$37,947,000	13,410	471,700	4,309	\$68,403

It will be seen by the above that the monthly pay roll for the manufacturing establishments of the city is, for men, \$471,700; for women, \$68,403. This amounts to \$6,481,206 a year. The above does not include the great building interest of the city—carpenters, masons, painters, and slaters not being reported, except in two or three wards, where their numbers are small. The largest number of establishments is in ward 3, and here, too, the amount of products and the number and monthly pay of men are the largest. In ward 4 there is the largest number of persons employed, and in ward 12 the capital is the largest. In ward 2 ship-building was not carried on to any great extent for the year covered by the report, and consequently the aggregate is much smaller than it would otherwise have been.

The aggregate of products, it will be seen, is \$37,947,000, but there are some omissions, which would have swelled the amount to upward of \$40,000,000.

One important omission is that of the great Boston Gas Company, which employs a large number of men and annually produces gas to a heavy amount in value.

The productions of the dentists of Boston, of whom there are 95, have been also, except in a few instances, altogether omitted.

These city manufactures, as we have said, are, however, not an exponent of the vast interests which Boston has in the products of the New England States, for most of which she furnishes the capital. Of late, efforts have been made to restore to Boston the control of the sale of her goods, by ceasing to send them to New York and other cities through the hands of agents, and attracting buyers there. This is described by Lorenzo Sabine, Esq., Secretary of the Board of Trade, as follows:—

The New England Society was incorporated in 1826,* with ample powers and important privileges; and its records show that during the thirty-four years of its existence, some of the most honored men of Massachusetts and of New England have assisted in the direction of its affairs. Its income from real and personal estate is limited to six thousand dollars annually, by a provision in the charter; but it may promote and encourage domestic manufactures of every description, as well as mechanical skill in every department of industry, by public sales and exhibitions of the products of the arts, by awarding premiums for new in-

* The persons named in the charter are Patrick T. Jackson, Jesse Putnam, John Doggett, Henry A. B. Dearborn.

ventions and for the best specimens of skill, by inducing any new discoveries which may be made in other countries, and by collecting models of inventions at home or abroad, and communicating the same to the manufacturers and mechanics of New England; and generally, by the adoption of such measures as the members of the corporation may think will at any time tend to the advancement of mechanical and manufacturing skill; while two public sales may be held annually, without payment of the tax imposed on goods sold at auction, on the single condition that the articles offered at these public sales shall be of the growth and manufacture of the United States. Originally, its officers were a president,* ten vice-presidents, twenty-five directors, a treasurer, a secretary, and two standing committees; but in 1829, the number of vice-presidents was reduced to four, and of directors to twelve.

Its earliest measure was the establishment of periodical exhibitions and sales of domestic goods by auction in Boston, the city government granting the free use of Quincy Hall for the purpose. The first sale was on the 11th of September, 1826, and the second on the 24th of the following month. These were succeeded by annual or semi-annual sales for several years, with beneficial results. Indeed, the plan of disposing of manufactures by auction brought American fabrics into notice; called public attention to the manufacturing interest; attracted buyers to the city from all parts of the country; secured a home market; and fixed the price of the staple productions of our looms in a manner not then to have been otherwise accomplished. The fairs and sales were, however, suspended in 1832, "owing to temporary circumstances, and inactivity on the part of the society," and were not resumed until 1859.

In 1840, a committee appointed the previous year to devise ways and means for the promotion of the interests and objects of the society, made a report, in which they remark that its charter is "a great boon," and of vast importance to the people of New England, and should be estimated and preserved; and they recommended the most rigid "observance of all the formalities and technicalities" of that instrument, and of the by-laws, as well as the keeping of accurate records of their transactions, in the belief that the time would come when the powers and privileges granted by the Legislature, "might be exercised with manifest advantage." In the judgment of the officers† of the past year, the period thus anticipated has arrived. At the annual meeting, January 12, 1859, a committee of five‡ were charged with the duty of inquiring into the expediency of re-establishing the semi-annual sales; and, on the 21st of that month, a report was made, in which all concurred in advising the measure. The result was the appointment of a second committee of fif-

* Levi Lincoln (then Governor of the Commonwealth) was the first president. His successors are Nathan Appleton, (in 1835;) Abbott Lawrence, (in 1848;) David Sears, (in 1852;) Samuel Lawrence, (in 1855;) Thomas G. Cary, (in 1856,) and Deming Jarves. (in 1860.)

† Of the officers elected in 1829, twenty-three have laid down mortality.

‡ The officers elected January 12, 1859, were as follows:—

President—Thomas G. Cary.

Vice-Presidents—Levi Lincoln, William Sturgis, James W. Paige, Deming Jarves.

Directors—Thomas Motley, James Read, John A. Lowell, James M. Beebe, Edward Brooks, Henry Hall, James K. Mills, Edward H. Eldridge, William Appleton, Samuel Torrey, Francis Skinner, Amos A. Lawrence.

Committee on Accounts—Samuel Torrey and Patrick T. Jackson.

Secretary—Peter Butler.

Treasurer—Abbott Lawrence.

‡ Thomas G. Cary, J. Wiley Edmonds, Nathan Appleton, Benjamin E. Bates, James W. Paige and Amos A. Lawrence.

teen,* to correspond with the manufacturers of New England, in order to ascertain whether a sufficient quantity of goods would be contributed to attract buyers, and if so, to make the necessary arrangements.

The answers afforded such encouragement that the committee proceeded to appoint the time and place for a sale, and to engage the services of auctioneers.† The catalogues of the various kinds of goods contributed occupy one hundred, and ten printed quarto pages; and as several lots were doubled, the quantity actually sold was considerably larger than was promised; while the "outside transactions," or private purchases, were probably quite half in amount to those at auction. Of the sale itself, and of the policy of semi-annual sales hereafter, we forbear to speak, simply on the ground of decorum. The New England Society is under the control of gentlemen who are entirely competent to decide every question which concerns it; who possess full knowledge of the deprecatory comments of persons and newspapers in other cities, and who are well acquainted with the opinions expressed here, as to the degree of success which attended the endeavor in July, to restore to Boston its former position in vending our manufactures, and we would not intrude with advice or suggestion.

The general business of Boston for the past year promised well until the election brought with it its disturbing causes. The manufacturers were well employed, and the flow of food and raw materials into Boston for distribution to the manufacturing districts gave evidence of a healthy activity, and goods in return flowed freely back for shipment. The annual report of the Boston *Shipping List* remarks:—

Up to the middle of November, all departments of our trade were in a very flourishing condition. The West, enriched with most bountiful crops at a time when short supplies in Europe guaranteed good prices—the South, with cotton crop prospects falling somewhat short of last year, but as all the leading markets were advancing for this staple, with manufacturers fully employed at home and abroad, a better range of prices was likely to make up for the deficiency of the crop—all conveyances by lake and river, canal and railroad, profitably crowded with produce seeking an outlet at the seaboard, giving more employment to the shipping interest and better freights than had been obtained for several years—manufacturers very generally employed and preparing for increased activity in all departments—it was no wonder that the suddenness of the panic in November, together with its novel and uncertain character, put a stop to all kinds of business, and upset for the time being all calculations for the future.

The receipts of the various articles of produce, with some few exceptions, show a fair increase over previous years. The increase of 58,272 bales of cotton, over the very large receipts of last year, is an indication that the cotton mills of New England have been fully employed. The activity of the trade in 1860, in connection with the prosperity of the two previous years, has placed this department of our industry in a very flourishing position. Woolen manufacturers have also enjoyed a very

* Deming Jarvis, David Sears, Henry A. Whitney, J. Wiley Edmonds, James M. Beebe, Amos A. Lawrence, Benjamin E. Bates, Tyler Batcheller, Augustus Lowell, Patrick T. Jackson, George C. Richardson, B. M. Mason, Henry A. Rice, and Alexander H. Rice.

† The gentlemen employed were Messrs. Townsend, Mallard & Cowing, N. A. Thompson & Co., Samuel Hatch, and John H. Osgood, all of Boston.

healthy and profitable trade during the year. Fears are entertained, however, that the coming year will be an unfavorable one for the manufacturing business on account of our present political and financial troubles. Manufacturers, in consequence, now move with the greatest caution. Purchases of the raw material are made only as wanted to complete assortments, as it is thought advisable to reduce present stocks rather than add to them, which is usually done at this season. Our cotton mills, with goods sold up comparatively close, and a fair export and home demand for the most desirable fabrics, will continue the production without much abatement for the present, but woolen manufacturers will reduce the production to some extent unless confidence is soon restored to business circles.

Breadstuffs, provisions, and produce generally have met with a very fair demand. Great Britain has purchased largely of these products the past year, and good prices have been realized. With the West and South our trade has been comparatively large, and with the facilities afforded by new steamship lines to the South, the prospect of a largely increased trade was quite promising for the future. With Canada our produce trade is increasing quite rapidly. This trade is yet in its infancy, as only a few years have passed since produce from that section sought our market to any extent, but now large supplies of flour, oats, peas, barley, butter, hogs, and other articles are daily arriving and make up no inconsiderable item of our aggregate receipts. The value of some few article of produce received from the South, the West, and the Canadas in 1860, nearly all of which is consumed in this neighborhood, is estimated as follows:—

Cotton.....	\$20,000,000	Leather.....	10,000,000
Flour.....	7,000,000	Provisions.....	3,000,000
Corn.....	1,500,000	Naval stores.....	700,000
Oats.....	600,000	Butter and cheese.....	3,500,000
Ooal.....	3,000,000	Wool.....	6,000,000
Hides.....	2,000,000		

The boot and shoe trade shows a falling off of 92,000 cases compared with 1859, the quantity forwarded from our city by water and railroad comprising 658,000 cases against 750,000 cases last year, a falling off in business equal to \$3,500,000. The prospects of the trade, which were encouraging early in November, have again become uncertain by the occurrences of the past six weeks, and manufacturers do not look for any activity for the present.

Calcutta goods, with the exception of gunny cloth, have moved off quietly during the year, but at prices on the whole which were not satisfactory. The imports of the year show a falling off in nearly all the leading items, such as linseed, saltpeter, gunny bags, and cloth, compared with last year. The markets of the country, however, have been amply supplied with Calcutta goods, and the amount taken for consumption, based upon the movements of previous years, have fallen short of expectation.

The shipping interest has been more fully employed and better paid than for several years. The large amount of breadstuffs going forward to Europe has given employment to all available tonnage, while vessels engaged in the East India trade, and other branches of our commerce, have obtained very remunerative rates, forming quite a favorable con-

trast with the general dullness which prevailed throughout the year 1859. The arrivals and clearances have been as follows:—

	Arrived.					Cleared.				
	Ships.	Barks.	Brigs.	Schooners.	Total.	Ships.	Barks.	Brigs.	Schooners.	Total.
1860..	187	359	866	1,879	3,291	122	259	860	1,907	3,238
1859..	248	381	811	1,649	3,089	177	380	757	1,572	2,886
1858..	171	324	764	1,488	2,747	139	302	722	1,508	2,666
1857..	246	394	759	1,509	2,905	214	359	671	1,569	2,813
1856..	241	351	723	1,377	2,692	210	357	755	1,618	2,940
1855..	227	326	849	1,682	3,084	193	398	948	1,759	3,298
1854..	246	395	883	1,567	3,091	233	394	873	1,671	3,171
1853..	203	333	883	1,566	2,984	160	372	912	1,629	3,073
1852..	286	332	840	1,456	2,864	188	350	839	1,486	2,863
1851..	191	288	817	1,542	2,638	133	349	806	1,560	2,848

Besides the above 47 steamers have arrived during the year, and 48 have cleared.

The business in some of the leading articles have been as follows:—

COTTON.—All good cotton arriving during the first ten months of the year found a ready sale at comparatively high prices, but with more abundant supplies of inferior descriptions, low grades were less sought after. Our market in October was more active and buoyant than any previous month of the year, the injury to the crop inducing manufacturers to purchase quite freely on the spot and to arrive. The political and financial troubles the past six weeks nearly put a stop to business, and prices have been irregular and unsettled, although near the close of the year a much better feeling prevails. Purchases to some extent early in December were made at 1 a 2 cents per pound decline, but the market has since recovered and present current rates are within $\frac{1}{2}$ a $\frac{1}{2}$ cents per pound of the highest point of the year. The arrivals of the year show an increase of 58,272 bales over last year, and are the largest ever received. The bulk of this increase has been received during the past four months, and was contracted for at comparatively high prices in the leading Southern markets. Buyers who looked to our market for supplies have been able to purchase on much easier terms. The activity among our manufacturers has continued through the year without abatement, and the consumption of the article has steadily increased. The prospects of the coming year open quite unfavorably, to say the least. The highest and lowest prices for five years have been as follows:—

MIDDLING FAIR NEW ORLEANS.

1860.....	12 $\frac{1}{2}$ a 14	1857.....	12 a 13 $\frac{1}{2}$
1859.....	12 $\frac{1}{2}$ a 14	1856.....	11 a 14 $\frac{1}{2}$
1858.....	11 a 14 $\frac{1}{2}$		

The receipts have been as follows:—

1860.....	bales	381,966	1857.....	bales	211,604
1859.....		323,694	1856.....		285,554
1858.....		279,528			

DOMESTICS.—The demand for cotton goods has continued without much abatement nearly the entire year, and the production of all our leading mills has found a ready sale at good and remunerating prices. The market opened with an active demand in January last for consumption and export, and large contracts were made early in the year for drills, heavy sheetings, and other desirable goods, the engagements of

drills extending in some instances throughout the year. Brown drills opened at $8\frac{1}{2}$ a 9 cents, and the entire production of the year has been sold mostly at these figures, although at the close $8\frac{1}{2}$ cents is the current rate. All other leading styles of cotton goods have sustained very good and uniform prices during the year. The comparative exports from Boston and New York the past five years have been as follows:—

	Boston.	New York.	Total.
1860.....packages	35,804	86,059	121,863
1859.....	33,362	74,549	107,911
1858.....	31,421	59,994	91,415
1857.....	30,959	26,653	57,612
1856.....	39,740	34,782	74,522

The prospects of the trade the coming year are not so encouraging as last year. Our exports to the East Indies have been materially checked for some months past, and drills begin to accumulate in the hands of manufacturers. The Western trade promises fair, but to what extent the political and financial excitement will interfere with operations with the South and West remains to be seen. The trade for a month or two past have been disposed to purchase lightly, but as there is only a small stock of desirable goods in the hands of manufacturers, no material change in prices is looked for at present. To California the shipments have amounted to 4,367 packages against 6,800 packages in 1859, 6,922 packages in 1858, 2,947 packages in 1857, 5,161 packages in 1856, 9,992 packages in 1855, 1,601 packages in 1854, and 6,524 packages in 1853. The highest and lowest prices for heavy sheetings and drills for five years have been as follows:—

	Sheetings.	Drills.	Exports.	Value.
1860.....	$8\frac{1}{2}$ a $8\frac{1}{2}$	$8\frac{1}{2}$ a 9	35,804	\$2,181,926 94
1859.....	$8\frac{1}{2}$ a 9	$8\frac{1}{2}$ a 9	33,362	1,974,408 34
1858.....	$7\frac{1}{2}$ a $8\frac{1}{2}$	$8\frac{1}{2}$ a $8\frac{1}{2}$	31,421	1,769,701 21
1857.....	$8\frac{1}{2}$ a $9\frac{1}{2}$	$8\frac{1}{2}$ a $9\frac{1}{2}$	30,959	1,907,155 22
1856.....	$7\frac{1}{2}$ a $8\frac{1}{2}$	$7\frac{1}{2}$ a $8\frac{1}{2}$	39,740	2,219,668 89

DREWOODS.—The highest and lowest prices for some years have been as follows:—

	St. Domingo logwood.	Sassa wood.	Lima wood.
1860.....	\$13 00 a \$17 00	\$40 a \$45	\$52½ a \$75
1859.....	12 50 a 15 50	40 a 52½	65 a 87½
1858.....	10 75 a 15 00	47½ a 75	90 a 125
1857.....	10 00 a 22 00	65 a 100	85 a 95
1856.....	16 00 a 22 50	50 a 65	70 a 90

FISH.—Prices of mackerel have been quite irregular the past year, owing to the variety of qualities embraced in the catch. For six weeks past prices have been quite unsettled, and fare sales for cash have been made at very low figures. Early in the season the prospects of the catch were very unfavorable, all vessels from the bay returning with unusually small fares, but during October and November shore mackerel were caught quite freely, and the bay fleet toward the end of the season were more fortunate. The returns of the Inspector are likely, in consequence, to add up much larger than last year, of which no inconsiderable part are medium 2's. The highest and lowest prices for some years past have been as follows:—

	No. 1.	No. 2.	No. 3.
1860.....	\$13 00 a \$18 50	\$6 50 a 14 00	\$5 00 a \$10 50
1859.....	14 00 a 17 00	11 50 a 15 50	8 00 a 11 00
1858.....	9 00 a 16 00	8 00 a 14 00	5 00 a 11 00
1857.....	8 00 a 14 00	7 00 a 13 00	6 50 a 9 00

Medium and large codfish have been comparatively uniform in price during the year.

	Large.	Small.
1860.....	\$3 00 a \$4 25	\$1 25 a \$2 50
1859.....	3 00 a 4 50	2 00 a 3 25

The exports of fish have been as follows:—

	1860.	1859.	1858.
Codfish .....drums	9,576	8,489	9,235
Codfish .....boxes	7,720	6,620	8,579
Codfish .....qtls.	38,886	33,702	56,218
Mackerel.....bbls.	46,167	56,041	77,193
Herring .....boxes	125,277	92,074	85,381

FLOUR.—The flour market maintained a very uniform tone until the middle of November, and prices were less fluctuating than in any previous year for ten years, the variations of the different brands, except a few of the very choice grades of superior, not exceeding 25 a 50 cents per barrel. The first six months of the year the export demand anticipated was not realized, and, with a large stock of old wheat and flour on hand, and the prospect of a larger crop than for many years, nothing could have prevented prices from touching a very low point except the failure of the crops in Europe, which at that time became quite apparent. From September to early in November the movements in breadstuffs were more extensive than at any previous period in the history of the trade. Every conveyance has been called into requisition to convey the surplus products of the West to the seaboard, and this surplus has been freely taken for the English market, the shipments to that destination largely exceeding any previous year. Notwithstanding this extensive export demand, prices rapidly declined the last of November and early in December, ranging some two weeks ago from \$4 25 a \$4 50 for the common. For four weeks in November and early in December the article was almost unsaleable, which, at a time when our harvest receipts were coming forward, greatly depressed the trade. This state of things was brought about by the unsettled state of political affairs, the unexpected and stringent money market, and the difficulty of negotiating exchange. Within the past two weeks the advance has been as rapid as the decline a few weeks previous, and the current prices at the close of the year are \$5 25 for common. The injury to the choice winter wheat in the vicinity of St. Louis has materially reduced the quantity of choice flour received from that section, but the choice family brands of Baltimore have in part made up this deficiency. From Canada very choice flour has been received, but not to such an extent as last year, but from Ohio and Michigan the flour received gives more than the usual satisfaction. The highest and lowest prices of Western fancy, extra, and superior flour, including choice St. Louis, for five years past, have been as follows:—

	Fancy.	Extra & superior.	Southern.	Extra & superior.
1860.....	\$4 50 a \$5 87	\$4 75 a \$9 00	\$5 50 a \$6 25	\$6 00 a \$8 75
1859.....	4 50 a 7 50	5 00 a 10 50	5 50 a 8 00	6 50 a 9 50
1858.....	4 25 a 5 75	4 50 a 8 25	4 75 a 5 75	5 50 a 7 00
1857.....	4 50 a 7 50	5 00 a 10 50	5 50 a 8 00	6 00 a 9 50
1856.....	6 00 a 9 25	6 75 a 11 00	6 50 a 9 50	7 50 a 11 00

The stock on hand is estimated at 275,000 bbls. against 250,000 bbls. in 1858, 225,000 bbls. in 1857, 150,000 bbls. in 1856, 150,000 bbls. in 1855, and 75,000 bbls. in 1854. The arrivals have been as follows:—

By Western Railroad ... bbls.	302,462	From Philadelphia	105,515
Northern	60,587	Baltimore	153,481
Fitchburg	35,787	Portland	217,897
Boston and Maine	14,808	Delaware	8,723
Providence	85,492	Norfolk and ports in Va. ...	1,973
Fall River	1,178	Other ports	26,657
From New York	25,381		
Albany	260	Total 1860	1,164,732
New Orleans	11,212	1859	1,049,186
Fredericksburg	7,862	1858	1,227,639
Georgetown	10,592	1857	1,049,023
Alexandria	12,054	1856	1,009,450
Richmond	77,876		

GRAIN.—Prices of corn ruled highest in January last, when sales were made at 90 a 12c. for Southern yellow and 85 a 90c. for white and mixed. From these price there was a gradual decline, the market touching the lowest point in December, when sales of yellow were made at 67 a 68c., and western mixed, 65 a 66c. per bushel. The present current rates are 76c. for old yellow and 75c. for western mixed, with which quality our market has been liberally supplied. Our receipts show an increase of 276,709 bushels compared with last year. The highest and lowest prices for five years have been as follows:—

1860	bush.	65 a \$ 92	1857	bush.	65 a \$ 1 05
1859		81 a 1 15	1856		55 a 1 05
1858		60 a 1 10			

The receipts of corn have been as follows:—

From		From	
New Orleans	bush. 52,350	New York State	bush. 862,417
Virginia	214,616	Other places	386,402
Maryland	296,886		
Pennsylvania	186,235	Total, 1860	2,098,250
Delaware	79,844		

The receipts of corn, oats, rye, and shorts for five years have been as follows:—

	Corn.	Oats.	Rye.	Shorts.
1860	bush. 2,098,250	1,467,611	33,156	551,795
1859	1,821,541	1,188,495	24,920	448,492
1858	2,447,814	989,691	45,604	464,274
1857	2,178,755	752,859	39,154	382,322
1856	2,608,553	866,280	40,258	314,292

WOOL.—In January last the market opened dull for domestic wool, and from January to June the tone of the market was rather downward, prices during that time having declined from 5 a 6c. per lb., ruling in June from 30 a 60c. for fleece, and 30 a 52c. for pulled. The movements of manufacturers and speculators in the wool-growing districts the last of June, and the eagerness with which the new clip was purchased by them at an advance of 2 a 3c. per lb., in many instances, on the previous year's prices, caused a much better feeling, and improved prices were realized until the sudden stringency of the money market in November put a stop to all business. The demand for some months past has been almost exclusively confined to the medium grades of fleece, and there is in consequence a

very good supply of fine wool on hand, while early in the year low and medium grades were neglected. The demand for woollen goods has been quite equal to expectation, the production of all our leading mills having been sold readily at satisfactory prices, but the prospect ahead is not considered very encouraging on account of the embarrassed state of all branches of trade. Manufacturers have, in consequence, reduced the production to some extent, and the business is likely to be quite small for the present. The prices previous to the panic ruled from 39 a 67c. for fleece, and 35 a 55 for No. 1 to extra pulled, but the few transactions since have been principally at 5 a 6c. per lb., decline from these figures. The stock is estimated at 2,000,000 lbs. against 2,500,000 lbs. in 1859. The receipts have been as follows:—

	Domestic. Bales.	Foreign.	
		Bales.	Quintals.
1860.....	48,974	30,160	16,471
1859.....	45,858	36,708	83,774
1858.....	32,306	19,882	10,322
1857.....	28,783	37,680	13,847
1856.....	33,711	14,478	17,755

EXCHANGE.—Bankers' 60 day bills on London ruled from 8½ a 10 per cent premium, from January to early in November; but for the past six weeks the rates have been almost entirely nominal, ruling from par to 5 per cent premium, with sales principally at 2 a 5 per cent during that time.

SPECIE.—The export of specie for the last nine years has been as follows:—

1860....	\$1,666,547 00	1857....	\$9,712,759 15	1854....	\$7,413,437 32
1859....	6,049,420 56	1856....	2,227,059 08	1853....	5,763,517 83
1858....	2,708,353 64	1855....	14,859,470 35	1852....	3,495,006 22

BOOTS AND SHOES.—The year just closed must again be put down as one of comparative dullness and inactivity in the boot and shoe trade. Prices during the year have ruled low and unsatisfactory, if we except some favorite styles of work, and the amount of goods sold show a considerable falling off compared with previous years. The spring trade was quite backward, and active operations did not commence before the middle of January. At the commencement buyers had everything their own way; the desire to close up stocks on the part of holders was so great that they were almost allowed to fix their own prices. A strike among the workmen in February, which became quite extended, afforded a partial relief to the market by reducing the production of desirable work, and for the balance of the season comparatively better prices were obtained for the styles of goods most affected by the strike. The fall trade was but a moderate one, and disappointed expectation. Neither the South nor the West purchased to the extent expected, and notwithstanding the production in the interval between the spring and fall business was less than for some previous years, still stocks were ample for all the requirements of trade, with, in fact, an oversupply of ordinary work on the market. The position of the trade at the close of the season was, however, more favorable than some previous years. The stock of all good and desirable work was sold up close, and the market was also relieved sufficiently of other descriptions to insure a healthy trade. Our manufacturers were looking forward for a large increase in the demand

from the West, on account of the general prosperity of that section, which it was believed would more than make up for any falling off from other quarters, but the sudden and unexpected money crisis in November last, extending to all branches of trade and all sections of the country, has changed the aspect of things, and will no doubt seriously interrupt the trade for the present. For a month or two past manufacturers have been curtailing operations, and the production of goods is now much smaller than for any previous year for some time. Both dealers and manufacturers look forward to a very unsatisfactory trade, but have been warned in season to prepared for such a state of things. The shipments to California during the year have been light compared with previous years. We look for some increase in the exports to that market the coming year. The shipments amount to 38,774 cases in 1860, against 50,254 cases in 1859, 64,577 cases in 1858, 32,868 cases in 1857, 42,258 cases in 1856, 64,958 cases in 1855, 37,621 cases in 1854, and 37,916 cases in 1853. The quantity of boots and shoes cleared at the custom-house has been as follows:—

1860	cases	195,191	1857	cases	234,422
1859		233,246	1856		224,322
1858		222,284			

The quantity forwarded by railroad has been 463,000 cases, which would make the aggregate amount of goods forwarded from our city, by water and railroad, 658,000 cases, against 750,000 cases in 1859, a falling off of 92,000 cases compared with last year, equal to \$3,500,000.

LEATHER.—The market for leather has been very dull throughout the year, and prices have ruled quite low, but more uniform than compared with some previous years. Manufacturers have purchased sparingly, and there has been scarcely a week when the market could be called active. The receipts this year, if will be observed, are made up from every possible source, by railroad and water, and comprise 491,304 sides and 216,854 bundles, equal to 3,100,000 sides of leather, the estimated value of which is about \$10,000,000. The highest and lowest prices for ten years have been as follows:—

HEMLOCK, BUENOS AYRES, AND ORINOCO.

	Per lb.	Receipts	
		Sides.	Bundles.
1860	18 a 22½	491,304	216,854
1859	17½ a 27	445,396	140,062
1858	17 a 26½	317,494	147,820
1857	17 a 34	317,648	109,118
1856	21½ a 34	220,016	131,123

GUNNY BAGS.—For the first three months of the year the market was very dull for gunny bags, and prices declined from 10½ a 10¾c. in January to 8½ a 9½c. for light and heavy bags early in April. During April some 5,000 bales were purchased on speculation and for consumption at from 8½ a 11c. and from May to October the article was held firm, with a speculative inquiry, some 19,000 bales having been sold and resold during that time, prices touching 13½ a 14c. for heavy bags the last of September. Since October there has been scarcely enough doing to make a price. The stock in first hands is 4,000 bales against 6,808 bales in 1859, 14,700 bales in 1858, 13,500 in 1857, 13,000 bales in 1856, 1,000 bales in 1855, and 5,000 bales in 1854. The highest and lowest prices for some years have been as follows:—

1860.....	8½ a 14	1857.....	10½ a 14½
1859.....	9 a 12½	1856.....	10 a 17
1858.....	8½ a 11½		

The imports have been as follows:—

	Boston.	Other ports.		Boston.	Other ports.
1860.....bales	8,480	3,073	1857.....bales	18,298	1,696
1859.....	10,988	3,981	1856.....	28,074	1,850
1858.....	14,191	2,070			

GUNNY CLOTH.—Prices of gunny cloth in January last ruled from 12 a 12½c. with sales mostly at 12½c. in January, February, and early in March. From the middle of March to the 1st of July there was an extensive speculative movement, and prices advanced from 12½c. in March to 17c., at which figure some sales were made the last of June. Upwards of 30,000 bales were sold and resold, to arrive and on the spot, during that time. This movement was based on the advance in East India freights and in consequence the increased cost of importation, moderate shipments from Calcutta, in connection with the fact that the consumption of the article had rapidly increased in 1858 and 1859, with the prospect of a further increase in 1860. It is now evident that prices were run up too rapidly and prematurely. High rates of freight did not check the shipments from Calcutta to the extent expected, while the injury to the cotton crop reduced materially the estimated amount required for consumption. Since July prices have been steadily declining, and the rates current for some weeks past, from 8½ a 9c. cash, are the lowest the article has ever touched in this market. These low figures have in part, however, been in consequence of the pressure in the money market, and the unsettled state of affairs at the South, where this article is consumed. The highest and lowest prices for some years have been as follows:—

1860.....	8½ a 17	1858.....	10½ a 16
1859.....	11 a 18	1857.....	9½ a 14½

ART. IV.—VALUATION OF LIFE INSURANCE POLICIES.

NUMBER I.

HAVING now completed in our previous numbers the collection of materials for our average rates of mortality, and combined them all in a single table, which we think more worthy of confidence than any other, because of the large number and long continuance of the observations on which it is based, of the great variety of the sources whence it is derived, of its freedom from the defects, errors, and anomalies incident to local, temporary, and select observations, and of its combining all the best materials that have been accumulated in the last hundred years, giving to each their appropriate influence according to their worth and reliability, we proceed to indicate the use of this table, and the method of valuation which we think most worthy of adoption by our American life companies.

The usual object of this valuation is to determine the earnings of a

life company before making a dividend to the stockholders or the insured. We have insisted in the July number of this Magazine for 1860, that in making these dividends no future expected profits should be anticipated and counted among the present assets; that the gain from the smaller mortality during the early years of the policy should not be distributed as an earned profit, but reserved for subsequent contingencies; that a large share of the loading is not added for expenses, but for the possibility of an adverse fluctuation in the mortality and other future contingencies, and, therefore, that this share of that part of the premium which is paid in advance for future hazards should be reserved; that the true or best table of mortality should be used in the valuations; and that if any of the premiums that have been already contracted for, should be too small for the future risk, the deficiency should be made up out of the present means before any distribution of profits; and that every one of these allowances are necessary, not merely as prudent and wise precautions to give stability and security to the company, but as proper and indispensable elements of the true valuations of the policies, which cannot be neglected in the just discrimination between the rights and claims of the present and future members of the company.

We mean by true valuation not the net, or the mathematical, or the gross, or the loaded, or the prudent, but what is demanded by strict and exact justice, as well as by a wise and provident judgment of the permanent interests of the company.

To confirm and establish these positions, we would suggest that the proper way of considering a valuation, is to inquire how much of the past payments have been made for past hazards, and how much for future. All that has been received for the former and not yet expended or due is earned; all that has been received for the latter belongs to the future stockholders and dividends, and is not available for present distribution.

The usual mode of considering this subject is to estimate the present worth of the future premiums, and of the future liabilities, and the difference of these is taken as the value of the policies. But it is not difficult from this stand-point to form the most erroneous conclusions, deluding the directors and managers of the company, and ruinous to its best interests. The marginal additions on all the future premiums that may or may not be received, may be reckoned among the present assets; the gains from the selection of lives, from lapsed policies, from a high rate of interest, from profitable investments, and from an expected diminution of mortality, may be anticipated, and the directors and stockholders made to believe that they have earned hundreds of thousands of dollars, when they have in fact been losing every year, by appropriating more than their real earnings to dividends, losses, and expenses.

Dr. Farr tells of a company that had expended nearly all of its receipts, and then figured up a profit of \$480,000. Statements have been published in which the earnings were reported at more than five times the whole receipts. Companies that have been receiving nearly twice as large premiums as they would themselves have charged for the risks that have been already incurred, have counted the whole balance on hand as profits, and sometimes even more than this. In this way the public have been deceived, and the company, and perhaps the actuary himself, deluded and ensnared.

Now, if they had considered what part of the past payments had been made for future hazards, it is not probable they would have fallen into any such mistakes. From both points of view correct conclusions may be obtained, but we prefer to look at the past and actual, and not the future and the uncertain.

It follows immediately, from this mode of consideration, that the computer has nothing to do with the premiums that are charged, unless they are too low for the risk that was assumed. His only business is to inquire how much has been received for future hazards, and if more than this is on hand it is earned. With the future gains, whether they are possible, probable, or certain, he has nothing to do.

Now, in order to learn what has been paid for the future, we have only to consider how much more ought to be charged to the policy-holder at his present age, than when his policy was first issued. This difference, multiplied by the value of an annuity at the present age of the insured, gives the usual formula, $(p - P)(1 + A)$ where p and P represent the proper premiums at the age of entrance and the present age, and A the value of an annuity of one dollar at the present age of the insured. These premiums are not gross, because the expenses on them have been already incurred. They are not net, or just sufficient to cover the average or probable mortality, because every company charges not only for the real risk and expenses, but also a margin for the possibility of an increase in the mortality over the average, and for other future contingencies. While ten, fifteen, or twenty per cent at farthest, on the net premium, will cover expenses, it is common to add a loading of thirty or forty per cent. The usual American premiums at thirty, thirty-five, and forty, are 2.36, 2.75, and 3.20, while by the Carlisle table they are 1.76, 2.02, and 2.37; by Farr's they are 1.84, 2.14, and 2.52; and by our average table they are 1.82, 2.12, and 2.50; showing an excess of more than twenty-five per cent over the largest premiums, about thirty per cent over ours, and thirty-five per cent above the Carlisle. Now, the average expenses of the sixteen American companies doing business in Massachusetts are only ten per cent, which is less than half of the loading. Almost all of the other contingencies, except the fluctuations in the mortality, are provided for in the low rate of interest. So that about half of the loading is charged for the possible excess of mortality. It follows, therefore, that ten or fifteen per cent is usually added to the premiums for this future contingency, and ought therefore be reserved; and, therefore, that p and P should be ten or fifteen per cent in advance of the net premiums. As it was right and proper to charge this at first, it is just and prudent that it should be appropriated to the purpose for which it was paid.

It is also evident from the mode of consideration we have suggested, that the true table of mortality should be used, and that any saving by a low mortality in the early years of the policy belongs to the future, since the past hazard is the actual and not the average.

And here we will introduce the opinion of Mr. Farren to confirm the correction we suggested in the July number for this deterioration of life. We concluded from Mr. Higham's discussion of the London observations, that the principal effect of selection was in the first year. Mr. Farren, "after eliminating the influence of selection over the first year, concludes," from the same observations, "that the rates of mortality of persons in-

sured," "would not particularly differ from those prevailing among the male population at large, taken indiscriminately, without regard to health."

The correction we suggested for this first year's deterioration, was to reduce P a fourth or a third of its value. The mortality given by Mr. Higham for the first year of insurance, compared with the corresponding rate in the actuaries' table, is as follows:—

	Ages,	25.	30.	35.	40.	45.
First year.....		.00414	482	574	620	848
Actuaries' table .....		.00777	842	929	1086	1221
Differences.....		.00363	360	355	416	373
Divided by $A + 1$.....		.00019	20	21	26	25

The average of these is .00022, and as they differ but little, and the correction is only approximate, it will be better to use this average for the reduction of P than the one suggested before, especially as the numbers given by Mr. Farren differ considerably from those of Mr. Higham.

If any of the premiums charged by any particular company are so low that, when reduced by the usual percentage of the company's expenses, they become less than P , these reduced premiums must be substituted for P in this formula; because, if any losing contracts have been made, sufficient must be reserved out of the present means to make up any deficiency from this source.

We shall now illustrate the modes of computation that have been adopted by different actuaries, and then compare some of these with the actual experience of the London life offices. The valuable contributions of Mr. James, to the recent Convention of Life Insurance Officers at New York, will enable us to present the most conclusive and satisfactory evidence of the propriety of the method of valuation we have recommended.

Most of the plans that have been adopted may be embraced in the following formula:—

$$H_{m+x} = \left(1 + \frac{A}{m+x} \right) \left(a p_{m+x} - b P_m + c \right)$$

1. Let a and b be unity, c zero, p and P the net Northampton three per cent premiums, A the Northampton value of an annuity, m the age when insured, and $m+x$ the present age, and we have the method employed by Mr. William Morgan, Actuary for the Equitable. As the Northampton table is very defective, this plan values neither the liabilities nor the premiums correctly; and the only thing to recommend it, is that the tabular mortality being too high, the net reservation is enough to meet the adverse fluctuations to which a company is exposed. This formula is now seldom used.

2. Let a , b , and c , be the same as before, P the actual charged premiums, and p the true premium, or that derived from what is esteemed the best table, and A the true annuity. This is the plan adopted by Neison and Woolhouse. It anticipates all the future profits, and counts them already earned, reserves nothing for expenses or future contingencies, and is suited only to delude the directors and the public, and lead the company to ruin and bankruptcy.

3. Let a , b , and c , be as before, and p and P the actual premiums. This is the formula used by Bowditch for the Massachusetts Hospital, and

errs on the safe side. It reserves all the loading on the payments that have been made for future risks, and as part of this has been already paid out for expenses, the reserve is larger than is necessary. As, however, it allows nothing for the deterioration of life, its reservation is but little in excess.

4. Let a , b , and c , be the same as before, and p and P the true net premiums, and A the true annuity. This is the method used by the Massachusetts Commissioners, who have adopted the Actuaries' as the true table. It gives the reserve too small, because it counts all the loading on the past payments for future risks as already earned, and makes no allowance for the depreciation of life, except what is due to the increased age of the insured. Besides this, the table used as the true one not only "understates the value of the sums insured," according to the high authority of Dr. Farr, but also "overstates the value of the premiums, and consequently underrates," by both these errors, the proper reserve. And if this could be said in England, it is still more likely to be true in the United States.

Some may suppose that the use of four per cent interest in the calculations may be a sufficient offset to these defects. But it must be remembered that four per cent is the net interest at which all the receipts are supposed to be continually compounded without any loss of time, after deducting the expenses of investing and managing the funds, the salaries and fees of officers and solicitors employed in making the investments, the losses and depreciation of stocks, the non-payment of loans, the loss of interest when money is detained by agents, transmitted from distant places, transferred from one investment to another, or lying idle in bank, as well as the possible reduction of interest in the long future period during which the policy may be in existence. Premiums are not always promptly paid, and when received they cannot be immediately loaned on satisfactory security. Losses are often settled before the insurance year has expired. All these and other things bring down the rate of interest much below the nominal. Dr. Farr thinks three per cent the proper rate in England, and the New York Life Convention decided in favor of four for this country. And they are to be commended, we think, for this decision. Higher net rates involve hazard in the investment, and this, in the long run, tends to bring down the rate to that on the best securities, which is lower than five, even in this country.

The high authority of an official valuation ought, by all means, be on the safe side. Some of our American companies need to be warned of the dangers they incur from their large dividends, or insufficient premiums, or extra hazardous risks, and we would counsel the commissioners to allow for every contingency. Very high authority in Boston has given them the same counsel we have here suggested, and we shall hope to see them use a better table, and increase their valuation so as to provide for the two contingencies we have mentioned above.

5. Let b and c be the same as before, but a .71, or .72, or .75, p the actual premium, and P the true, and A the true annuity. This plan is used by one of our American companies—the Carlisle being taken for the true table. The object of using a fraction for b is to reduce the charged to the net premium, and this purpose determines its magnitude. This plan is, therefore, nearly the same as the preceding, except that the Carlisle table is adopted, which has a less mortality than the Actuaries',

and is more irregular and defective. We think this formula gives the reserve too small, because of the low mortality of the table, the omission of all the loading on the past payments, and of any allowance for the deterioration of life.

6. Let a and c be as at first, and b only .80, and p , P , and A the true values. This is recommended by Dr. Farr.—(Reg. Gen. Rep., vol 12, page lxiii.) It gives an ample reserve, and might suit for an old office like the Equitable, but it is not at all adapted to most companies. For the first few years the reservation would exceed the whole receipts.

7. Let c , p , P , and A be the same as in the last method, but a and b equal and more than unity, say 1.10 or 1.15. This formula is used by some of our best American companies, and is admirable. It adds a percentage to the reserve, thus retaining out of the payments that have been made for future risks, the loading that was added for future contingencies; not the whole loading on this payment, but the remainder that is left after paying expenses. As ten or fifteen per cent has been paid by the insured for their future security, it is wrong to divide this among the present members, some of whose policies will soon terminate by death or purchase, or among the present stockholders, who have yet no claim to the money not earned. As every company ought to require for the hazards it assumes at least ten or fifteen per cent beyond expenses, to provide for the contingency of a higher mortality than the tabular rate, it ought to keep its future risks secured in like manner. This formula does no more, then, than retain for the future members what they have paid for the future hazard, and for the future security what ought to be retained. We think 1.10 is the least value that should be given to a and b , and prefer 1.15; some will think the use of 1.20 more prudent.

8. Let all be the same as in the preceding case, and c be .00022, and the formula will then embrace the depreciation of life for the first year after the issue of the policies, according to the experience of the seventeen London offices on 62,537 insurances. This makes the formula all that can be desired, especially if our average table be used for A , p , and P .

9. Another method of making an allowance for the possible increase of mortality above the tabular amount, is to construct a table with a rate of mortality ten, twenty, or twenty-five per cent above the average or true, and to calculate the reservation by such a table. As the mortality is as likely to be excessive in one future year as another, and as any general cause, like climate, epidemics, or new diseases, will probably fall on each age of life, not indiscriminately, but in proportion to the weakness of the vital energies, that is, in proportion to the ordinary mortality at any age, the proper mode of anticipating this liability is to add a percentage to the true or average rate of mortality at every period of life, and to compute the liability from such a table. This has the

should be ten, twenty, or twenty-five per cent higher than is given by the tables.

As we think such a mode of valuation is better than adding a percentage to the reserve, we have constructed the tables at the end of this article by increasing the average rate of mortality twenty-five per cent. The usual columns, D, N, M, and A, as well as the premiums for each age, counting the rate of interest four per cent, will be found under their appropriate heads. These have been all calculated in duplicate, and the results tested by obtaining the premiums from D and N, and also from N and M, and the agreement of these, even to the eighth decimal place, is a proof of the arithmetical correctness of all the numbers in every column. The proofs have been carefully read, and it is believed all the figures are correctly printed. Some may think that twenty-five per cent is too large an addition for this contingency, but as it does not give a larger reserve than the ten per cent added in the seventh and eighth methods of valuations, this objection cannot be sustained.

10. If to this be now added the saving in the first year of life, by making c equal .00024, which is the average correction by Higham's observations, when divided by the $1 + A$ of this table, we shall finally have what we regard as the most satisfactory mode of valuation.

11. If five per cent should be added to the result of this method, by making a and b 1.05, for the purpose of meeting any other future contingency besides the exposure to adverse fluctuations of mortality, we shall have a final valuation; covering every liability and securing safety and stability and permanence beyond fear, doubt, or suspicion.

We will now give two examples of these different modes of valuation, so as to compare the result with one another, and note the differences between them. Suppose two policies for \$10,000 each, to be taken at the ages of thirty and forty, the premiums being \$236 and \$320, and let it be required to value the policies after ten premiums have been paid and just before the eleventh is due. The several values will be as follows:—

1	W. Morgan: Northampton three per cent; using the actual premiums for P , because they are smaller than P	\$1,644 86	and \$1,786 98
2	Woolhouse & Neison: Carlisle four per cent.	24 27	227 72
3	Bowditch: Using 4.60 for fifty and Carlisle for A ..	1,350 22	1,941 66
4	Wright & Sargeant; Actuaries' four per cent.	1,079 27	1,629 92
4A	James: Actual experience of the 17 London offices.	1,176 80	1,652 12
5	American: Using the Carlisle table and .71 for a ..	830 22	1,235 46
6	Dr. Farr: Farr's No. 2, 4 per cent, using his 20 per cent.	1,647 36	2,202 94
7	American: Farr's No. 2, using 1.10 for a and b	1,177 06	1,686 23
7A	American: Using our av. table, and 1.10 for a and b	1,172 45	1,724 78
8	American: Same as the last, but counting deterioration of life.....	1,207 13	1,751 84
8A	The same as the last, but counting a and b at 1.15.	1,260 43	1,830 24
9	The average table, with 25 per cent inc. of mortality	1,142 97	1,677 11
10	Same as the last, but counting depreciation of life..	1,178 55	1,708 77
11	Same as the last, but counting a and b 1.05.	1,235 70	1,790 62

Of these, 1 is too large, especially at the younger ages; 2 does not compare at all with the rest; 3 and 6 are too large at all ages; 4 and 5 are too small, especially for recent policies; of the rest, we regard 8 and 10 as giving the least that is consistent with justice, propriety, and safety; 8A and 11 are more prudent and preferable, especially for the United States.

We will now compare some of these methods with the actual experience of the seventeen London offices, and thus submit them to the test of actual trial on by far the largest experience that has ever been collected. The contributions of Mr. James enables us to say how much ought to be reserved on a policy issued at the age of thirty that had been running any number of years, by comparing it with thousands of other policies issued by those London companies at the same age. So also for other ages than thirty, the insurances made at any age being all kept by themselves and traced through their whole duration, without being mixed up with other policies issued at different ages.

This is obviously the true test of any plan of valuation. Every policy to be valued is compared with others issued under exactly the same circumstances, and the computed value compared with the real. Below is a table of values at thirty-five, and also the average for twelve policies, all for \$10,000, at six ages: one at 25, two at 30, three at 35, three at 40, two at 45, and one at 50, which numbers will nearly represent the admissions of our American offices.

The first column contains the valuation according to the actual experience of the seventeen London offices; the second, the Massachusetts valuation, according to the general experience of those offices when the young and old policies are all combined; the third and fourth, the valuations given by our eighth and tenth methods, which we have stated to be the very lowest that ought to be adopted. *A*, *p*, and *P* being taken from our average tables, and 1.10 being used for *a* and *b* as in the eighth method above explained.

	Policies issued at 35.—				Average of six ages.—			
	James.	Wright.	Eighth.	Tenth.	James.	Wright.	Eighth.	Tenth.
First year	\$159	\$114	\$161	\$160	\$177	\$134	\$179	\$177
Two years.....	288	234	289	285	321	273	327	322
Three years.....	407	356	420	413	464	415	478	470
Four years.....	536	482	555	544	612	561	635	621
Five years.....	672	613	693	679	764	710	791	778
Average of five years.	401	358	424	416	468	419	432	474
Ten years.....	1,391	1,334	1,446	1,412	1,563	1,506	1,643	1,605
Twenty years.....	3,064	3,013	3,255	3,155	3,330	3,288	3,478	3,439

This comparison shows that the Massachusetts method, although founded on the general experience of the London offices, gives a less valuation for all ages than the real experience of those offices when the insurances are assorted so as to tell the mortality on policies precisely similar to those that are to be valued; the deficiency being as much as twenty-five per cent below the proper result in the first year, and ten per cent below when the average duration of the policies is two or three years; the percentage of deficiency decreasing as the policies become older. It also shows that our eighth and tenth methods give results just sufficient to meet the deaths at the early ages of insurance, leaving nothing for the chance of adverse fluctuations of mortality; while at the older ages, when the policies have had a long continuance, only three or four per cent is allowed for this and other future contingencies. These results satisfy us, and we think they should satisfy every one, that these two plans give the least valuation that ought to be adopted to comply with the demands of justice and safety, and that the eleventh is to be preferred, if prudence and undoubted security are thought to be more important than justice and safety.

	R(1.25).	Living.	Log. D.	Log. N.	Log. M.	Premium.	Annuity.
15..	.00786	7000	7.5895979	8.8665822	7.0244891	.0143849	17.92276
16..	.00826	6945	7.5691376	8.8430026	7.0122604	.0147658	17.78738
17..	.00863	6888	7.5485020	8.8192483	6.9996449	.0151494	17.65290
18..	.00898	6828	7.5277045	8.7953180	6.9867008	.0155376	17.51883
19..	.00930	6767	7.5067536	8.7712095	6.9734687	.0159316	17.38468
20..	.00960	6704	7.4866624	8.7469202	6.9600028	.0163336	17.24983
21..	.00988	6640	7.4644397	8.7224461	6.9463415	.0167454	17.11867
22..	.01016	6574	7.4430942	8.6977827	6.9325217	.0171688	16.97581
23..	.01040	6507	7.4216302	8.6729248	6.9185661	.0176052	16.83589
24..	.01064	6440	7.4000566	8.6478661	6.9035103	.0180569	16.69333
25..	.01086	6371	7.3783776	8.6225995	6.8903755	.0185258	16.54777
26..	.01109	6302	7.3566020	8.5971170	6.8761962	.0190142	16.39963
27..	.01132	6232	7.3347254	8.5714095	6.8619670	.0195235	16.24583
28..	.01155	6161	7.3127478	8.5454673	6.8476955	.0200552	16.08911
29..	.01180	6090	7.2906692	8.5192800	6.8333894	.0206115	15.92820
30..	.01205	6018	7.2684306	8.4928858	6.8190819	.0211932	15.76298
31..	.01231	5946	7.2461823	8.4661232	6.8046317	.0218016	15.59361
32..	.01258	5873	7.2237696	8.4391289	6.7901855	.0224417	15.41948
33..	.01287	5799	7.2012382	8.4118393	6.7756896	.0231127	15.24056
34..	.01318	5724	7.1785793	8.3842392	6.7611305	.0238172	15.05883
35..	.01350	5649	7.1557838	8.3563129	6.7464947	.0245574	14.87825
36..	.01384	5572	7.1328476	8.3280437	6.7317816	.0253360	14.67459
37..	.01420	5495	7.1097816	8.2994135	6.7169791	.0261557	14.47576
38..	.01458	5417	7.0865171	8.2704029	6.7020768	.0270198	14.27164
39..	.01499	5338	7.0631052	8.2409913	6.6870660	.0279302	14.06212
40..	.01542	5258	7.0395124	8.2111558	6.6719246	.0288914	13.84720
41..	.01586	5177	7.0157301	8.1808732	6.6566474	.0299071	13.62659
42..	.01632	5095	6.9917536	8.1501172	6.6412389	.0309827	13.40004
43..	.01681	5012	6.9675741	8.1188596	6.6256865	.0321238	13.16725
44..	.01733	4928	6.9431783	8.0870692	6.6099817	.0333359	12.92807
45..	.01789	4842	6.9185526	8.0547119	6.5941087	.0346256	12.68230
46..	.01851	4756	6.8936794	8.0217509	6.5780461	.0359994	12.42986
47..	.01920	4668	6.8685320	7.9881456	6.5617567	.0374637	12.17084
48..	.01998	4578	6.8430791	7.9538527	6.5451959	.03890250	11.90546
49..	.02085	4487	6.8172807	7.9188254	6.5283051	.0403693	11.63411
50..	.02182	4393	6.7910965	7.8830139	6.4110291	.0424634	11.35713
51..	.02290	4297	6.7644820	7.8463449	6.4933075	.0443550	11.07488
52..	.02410	4199	6.7378877	7.8088211	6.4750761	.0463718	10.78782
53..	.02544	4098	6.7097596	7.7703213	6.4562622	.0485222	10.49640
54..	.02692	3993	6.6815849	7.7307997	6.4367878	.0508146	10.20121
55..	.02856	3886	6.6526500	7.6901865	6.4165743	.0532584	9.90276
56..	.03040	3775	6.6230327	7.6484063	6.3955335	.0558634	9.60166
57..	.03244	3660	6.5925920	7.6053787	6.3735514	.0586371	9.29880
58..	.03471	3541	6.5612365	7.5610190	6.3505191	.0615886	8.99499
59..	.03722	3418	6.5288610	7.5152373	6.3263105	.0647252	8.69117
60..	.03996	3291	6.4953547	7.4679394	6.3007968	.0680546	8.38825
61..	.04293	3160	6.4606107	7.4190261	6.2738609	.0715871	8.08689
62..	.04612	3024	6.4245211	7.3683924	6.2453887	.0753849	7.78762
63..	.04952	2885	6.3869814	7.3157259	6.2152765	.0793141	7.49062
64..	.05314	2742	6.3478911	7.2615050	6.1834800	.0835459	7.19623
65..	.05699	2596	6.3071435	7.2049957	6.1497505	.0880552	6.90410
66..	.06111	2448	6.2646265	7.1462504	6.1141860	.0928722	6.61419
67..	.06554	2298	6.2202079	7.0851033	6.0764608	.09800297	6.32648
68..	.07039	2148	6.1737352	7.0213701	6.0365773	.1035636	6.04101
69..	.07571	1997	6.1250027	6.9548447	5.9942712	.1095032	5.75837
70..	.08155	1845	6.0737776	6.8853023	5.9493009	.1158774	5.47925
71..	.08798	1695	6.0197998	6.8124985	5.9013956	.1227149	5.20488
72..	.09501	1546	5.9627709	6.7361693	5.8502434	.1300392	4.93469
73..	.1026	1399	5.9023813	6.6560313	5.7955269	.1378782	4.67087
74..	.1109	1255	5.8383341	6.5717795	5.7369521	.1462759	4.41309
75..	.1200	1116	5.7702514	6.4830770	5.6741324	.1552585	4.16209
76..	.1298	982	5.6977007	6.3895629	5.6066219	.1648837	3.91883
77..	.1406	855	5.6202865	6.2908577	5.5310290	.1750537	3.68851

	R(1.35.)	Living.	Log. D.	Log. N.	Log. M.	Premium.	Annuity.
78..	.1520	735	5.5374990	6.1865479	5.4658306	.1859014	3.45707
79..	.1644	623	5.4488616	6.0762065	5.3715513	.1973989	3.23980
80..	.1776	521	5.3538267	5.9598792	5.2806381	.2095361	3.03230
81..	.1917	428	5.2518764	5.8855921	5.1825784	.2223245	2.88455
82..	.2066	346	5.1424157	5.7043707	5.0767750	.2357243	2.64716
83..	.2221	275	5.0248745	5.5651963	4.9626634	.2497281	2.46994
84..	.2382	214	4.8987650	5.4175605	4.8397766	.2643724	2.30214
85..	.2550	163	4.7635727	5.2608969	4.7076214	.2797206	2.14285
86..	.2724	121	4.6186956	5.0945651	4.5656131	.2958340	1.99137
87..	.2904	88.2	4.4635550	4.9178467	4.4132007	.3128629	1.84637
88..	.3093	62.6	4.2975352	4.7298742	4.2498048	.3310782	1.70607
89..	.3296	48.2	4.1197914	4.5295321	4.0746114	.3508160	1.56886
90..	.3517	29.0	3.9290921	4.3153760	3.8864034	.3724195	1.43379
91..	.3759	18.8	3.7238347	4.0885789	3.6336082	.3963048	1.30009
92..	.4027	11.7	3.5020556	3.8378071	3.4642707	.4231200	1.16661
93..	.4385	7.00	3.2612147	3.5689271	3.2258911	.4539040	1.03101
94..	.4699	3.97	2.9978313	3.2744781	2.9645554	.4898760	0.89277
95..	.5140	2.10	2.7047058	2.9481185	2.6744171	.5324743	0.76151
96..	.5631	1.02	2.3743087	2.5806408	2.3465798	.5583632	0.60817
97..	.6346	.441	1.9926586	2.1583340	1.9674810	.6443873	0.46445
98..	.7159	.161	1.5383937	1.6596002	1.5157317	.7180116	0.32192
99..	.8144	.046	0.9748316	1.0461470	0.9546870	.8101026	0.17846
100.	1.000	.008	0.2263763	0.2263763	0.2093429	.9615386	0.00000

ERRATA IN THE LAST NUMBER.

For 18.343, annuity at age 18, read 18.346. | For .036760, premium at age 50, read .036726.

JOURNAL OF MERCANTILE LAW.

PROFITS AND PARTNERSHIP.

In the Supreme Judicial Court of Massachusetts. Before Judge METCALF.
Dana H. Fitch and others vs. Samuel P. Harrington and others.

1. An agreement between one partner and a third person, that the latter shall participate in that partner's share of the profits of the firm, as profits, renders him liable as a partner to the creditors of the firm, although, as regards the other members of the firm, he is not their co-partner.
2. The acts and declaration of a person not a partner are not admissible to charge him as a partner, without showing that they were brought home to the plaintiff's knowledge.

Action on a promissory note signed by the name of WHITTEMORE, HARRINGTON & Co. Trial before METCALF, J., who signed this bill of exceptions:—

"SAMUEL P. HARRINGTON alone made defence; and the only question was, whether he was liable, as a partner, with the other defendants.

"It was in evidence that the firm of WHITTEMORE, HARRINGTON & Co. was formed in July, 1856, and carried on business until the latter part of October, 1857, when they stopped payment; and that the notes in suit were given for articles used in the business of the firm.

"The plaintiffs introduced evidence tending to show that SAMUEL P. HARRINGTON was a member of said firm, as between the partners themselves; that the share in the concern, standing in the name of LEONARD HARRINGTON, (one of the members of the firm,) was owned jointly by LEONARD and SAMUEL P. HARRINGTON; that SAMUEL P. held himself out to the plaintiffs, and also to the public at large, as one of the partners in the firm; and that the plaintiffs gave credit to WHITTEMORE, HARRINGTON & Co., under the belief that he was a partner.

"The defendant, SAMUEL P. HARRINGTON, introduced evidence, tending to show that he was not a partner in the firm; that he had not held himself out as such to the public at large, nor to the plaintiffs; that he had no interest in the share of the concern standing in the name of LEONARD HARRINGTON; and that he was not known nor recognized as a partner by the members of the firm.

"The plaintiffs requested the court to instruct the jury, that although SAMUEL P. HARRINGTON was not known by the members of the firm generally to be a partner, yet if the share in the partnership concern, which share stood in the name of LEONARD HARRINGTON only, was owned jointly by LEONARD and SAMUEL P., and SAMUEL P., as between him and LEONARD, was entitled to the profits, if any, which might be derived from that share, he (SAMUEL P.) was a partner in the firm, as to the plaintiffs, and liable to them in this action; that if he held himself out as a partner in the firm, under such circumstances as to induce the plaintiffs to give credit to the firm under that belief, though he was not in reality a partner, he was still liable to them as such; and that his acts and declarations, if made publicly, though not brought to the knowledge of the plaintiffs, were competent evidence that he so held himself out, and thereby induced the plaintiffs to give credit to the firm, under the belief that he was a partner.

"The court declined to give instructions in the terms requested; but instructed the jury as follows:—That if SAMUEL P. HARRINGTON was a member of the firm, when the notes in suit were given, he was liable in this action, whether the plaintiffs then knew or did not know that he was a partner, or whether they did or did not give credit to the firm on the belief that he was a partner; that if he was not a member of the firm, yet, if by his acts and declarations, which were brought home to the knowledge of the plaintiffs, he led them to believe that he was a member of the firm, and to give credit to the firm in that belief, he was liable to them in this action; that his acts and declarations to persons other than the plaintiffs were evidence for the jury to consider, in determining the question whether he was a member of the firm; but if such acts and declarations did not satisfy the jury that he was a member of the firm, then they were not evidence which would render him liable to the plaintiffs, unless knowledge of them was brought home to the plaintiffs, and induced them to give credit to the firm in the belief that he was a member of the firm; that if the share in the partnership concern, which share stood in the name of LEONARD HARRINGTON only, was owned jointly by him and SAMUEL P. HARRINGTON, then SAMUEL P. was liable in this action; but if there was a sub-partnership between LEONARD and SAMUEL P., by which SAMUEL P. was to share in the profits of the firm, to which profits LEONARD was entitled, this alone would not make SAMUEL P. liable for the debts of the firm.

"The jury returned a verdict for the defendant, and the plaintiffs excepted to the instructions given to the jury."

The opinion of the court was delivered by

MERCALF, J.—We are all of opinion that the plaintiffs are entitled to a new trial, for the reason that the instruction respecting a sub-partnership between LEONARD HARRINGTON and SAMUEL P. HARRINGTON, given, as it was, without any explanation, may have misled the jury. That part of the instructions was given on the authority of COLLYER on Partnership, (3d ed.) section 194, which was cited by the defendants' counsel at so late a stage of the trial, that the court had no opportunity to examine the position there laid down, which is thus:—"Although the *delectus personarum*, which is inherent in the nature of partnership, precludes the introduction of a stranger against the will of any of the copartners, yet no partner is precluded from entering into a sub-partnership with a stranger; *nam socii mei socius, meus socius non est*. In such case, the stranger may share the profits of the particular partner with whom he contracts, and, not being engaged to the general partnership, will of course not be liable for their debts."

The only decided cases which Mr. COLLYER cites, in support of this position, are that of Sir CHARLES RAYMOND, referred to by Lord ELDON, in *Ex parte BARROW*, 2 Rose, 255, and that of BROWN vs DE TASTET, Jac. 284. In the case in 2 Rose, Lord ELDON said:—"I take it to have been long since clearly established, that a man may become a partner with A., where A. and B. are partners, and yet not be a member of that partnership which existed between A. and B. In the case of Sir CHARLES RAYMOND, a banker in the city, a Mr. FLETCHER

agreed with Sir CHARLES RAYMOND, that he should be interested so far as to receive a share of his profits of the business, and which share he had a right to draw out from the firm of RAYMOND & Co. But it was held, that he was no partner in that partnership, had no demand against it, had no account in it, and that he must be satisfied with a share of the profits arising and given to Sir CHARLES RAYMOND." In the case in Jacob, it was decided, that where one of several partners had agreed with a third person to give him a moiety of his share in the concern, the Court of Chancery might decree an account between them, without making the other partners parties to the bill. These cases show this only:—That as between the members of the firm, *inter sese*, Mr. FLETCHER, in the first case, and the third person in the other case, were not copartners. They decided nothing as to the liability of either to the creditors of the existing firm.

But Mr. COLLYER also cites 2 Bell Com. 636, where it is said:—"There may be a sub-contract, by which a stranger may be admitted to divide with any of the partners his share of the profits. The other partners are not bound to take notice of this sub-contract; nor is there any responsibility attached to it, by which the stranger, as sharing in the profit of the concern, becomes liable for the debts of the partnership." *ERSKINE'S Institutes*, and the case of *FAIRHOLM vs. MAJORIBANKS*, decided in Scotland in 1725, are cited in support of this position. In looking at 3 *Ersk. Inst.*, (ed. of 1828,) sections 21, 22, we find that nothing is there said concerning the liability of such stranger for the debts of the partnership. Mr. *ERSKINE* says, "if any of the partners shall assume a third person into partnership with him, such assumed person becomes partner, not to the company, but to the assumer." We have not seen the report of *FAIRHOLM vs. MAJORIBANKS*. But Mr. *STARK* cites that case and *ERSKINE'S Institutes*. in support of the following passage in his work on partnership:—"Sub contracts between partners and other persons, by which a beneficial interest in the partnership is granted, do not create new partners. The partner himself remains alone liable to company creditors." He adds a quotation from the *Digest*, which is silent, however, as to such other persons' liability for the debts of the partnership. *STARK* on Part. 155. It would seem, therefore, that the Scotch writers, Mr. *BELL* and Mr. *STARK*, have stated the doctrine which Mr. *COLLYER* has repeated, only as an inference of their own from the established law, that such a sub-contract as those writers mention, between one member of a firm and a stranger, does not make the stranger, as between him and the firm, their copartner; and hence that the law of Scotland, as to such stranger's liability for the debts of the firm, may not differ from the law of England and of this country. Indeed, it is hardly to be supposed that it was decided in *FAIRHOLM vs. MAJORIBANKS*, that such a stranger was not liable for the debts of the firm in a case in which, by the English law and ours, he would have been liable. For both Mr. *BELL* and Mr. *STARK*, as well as Mr. *COLLYER*, correctly state the English law on this point, without an intimation that the Scotch law is different, except by subsequently inserting the passage which the defendants' counsel cited at the trial of the present case. 2 *BELL Com.* 625, 626, *STARK* on Part. 137 *et seq.* *COLLYER* on Part. book i., c. 1.

Now, what is our law and the law of England on this subject? We understand it to be thus:—An agreement between one copartner and a third person, renders him liable, as a partner, to the creditors of the firm, although as between himself and the members of the firm, he is not their copartner; but if such third person, by his agreement with one member of the firm, is to receive compensation for his labor, services, &c., in proportion to the profits of the business of the firm, without having any specific lien on the profits, to the exclusion of other creditors, he is not liable for the debts of the firm. *Denny vs. Cabot*, 6 Met. 90-94. *Bradley vs. White*, 10 Met. 305. *Holmes vs. Old Colony Railroad*, 5 Gray, 58. *Burckle vs. Echart*, 3 Comst. 132. 3 *Kent Com.* (6th ed.) 33 *et seq.* *Parsons' Merc. Law*, 168, and note.

In order to enable the jury to decide whether *SAMUEL P. HARRINGTON* was liable for the debts of the firm of *WHITEMORE, HARRINGTON & Co.* by reason of a sub-partnership between him and *LEONARD HARRINGTON*, they should have received instructions more definite and discriminating than they could derive

from the mere words of Mr. COLLYER. The kind of agreement which would render SAMUEL P. liable for the debts of the firm, and the kind of agreement which would not render him liable therefor, should have been so explained to them that they might intelligently decide whether the agreement between the two (if any was proved) was such as did or did not render SAMUEL P. liable as a partner, for the debts due from the firm to the plaintiffs.

COMMERCIAL CHRONICLE AND REVIEW.

POLITICAL INFLUENCES—SUBSIDENCE OF PANIC—RISKS AND OBLIGATIONS—CIVIL WAR—FAILURES IN THE UNITED STATES—STAGNATION OF ENTERPRISE—DECLINE IN DEMAND FOR CAPITAL—BANK RETURNS—SPRING BUSINESS—LARGE EXPORTS—WHEAT VALUE—NATIONAL BALANCE—LOW RATES OF EXCHANGE—FUTURE ELEMENTS OF SPECULATION—RATES OF MONEY—TREASURY NOTES—GOVERNMENT LOAN—HIGHER RATES—STOCK MARKET—DEPARTMENT FRAUD—INFLUENCE ON PRICES—RATE OF EXCHANGE—SPECIE ARRIVALS—DISPOSITION—ASSAY OFFICE—MINT—WESTERN EXCHANGES.

THE political events which produced the financial panic on the announcement of the Presidential election in November have continued to assume greater importance in the same direction, and to threaten the most serious results for the future. Nevertheless, the "panic" feeling which had been manifest gradually disappeared, and commercial fears subsided in proportion. The first effect of serious difficulties is always to alarm those who have outstanding risks and obligations that may be affected, and there is, as a matter of course, a general and simultaneous effort to cover those risks and use every effort to prepare for the obligations, and these efforts produce an unusual demand for money at any price. This is the more stringent and the more marked when the evils are of an unusual character, and bear on their face, as now, the portentous feature of disunion and civil war, with all its horrors in the background. Annexed hereto we give the statistics of the New York Commercial Agency, which indicates the effect of the panic upon those houses which were caught with outstanding obligations they could not meet in face of the paralysis in collection. The pressure, however created, where the general state of affairs is sound, cannot but be brief, since new enterprises are at once abandoned and propositions for new business at least postponed, and the lapse of a very little time brings with it the maturity and cancelment of contracts and the withdrawal of risks. The sudden stringency at once gives place to ease, and the falling value of money or capital marks the stagnation of those business enterprises which usually demand it. The bank returns, which we publish as usual, illustrate the operation. Under the demand of November the loans rose \$10 000,000, and the price of money was very high. That amount seems, however, to have sufficed to cover immediate wants, and the discounts fell \$6,000,000 to Jan. 1, by means of payment under collections. The low rates of bills and the high rates of money drew specie rapidly from Europe, and some \$10,000,000 arrived thence up to the first week in January, in face of an export of \$6,000,000 in the same period last year, making a difference of \$16,000,000 in the exchanges abroad. At the same time the Western exchanges fell to reasonable rates, permitting of collections, while Southern credit with banking houses were very generally cut off. While no

new notes having been created for new business, the bank line of discounts drops of its own weight, and the rate of money declines still farther. The usual spring business has not been provided for, and manufacturing has been checked. That is to say, the demand for capital in its usual employments has been curtailed to an extent, if we take the magnitude of interests into consideration, seldom before realized. Fortunately, at such a juncture, the state of the foreign markets has been such as to attract unusual quantities of produce, and the exports from the port of New York, as will be found in the trade tables, have, in the last quarter of 1860, been thirty per cent larger than ever before in the history of the country. This embraces farm produce or food to an extraordinary extent. The export of wheat and flour from the United States, since September 1, exceeds by \$25,000,000 the exports of the same articles in 1859, for the same period in which, also, there has been a considerable decline in the amount of goods imported. The demand for cotton abroad has also been active, giving full credits against that article, and there has also been a disposition to invest in stocks at the low prices caused by the panic. The result is, then, following—a balance in favor of the country left by last year's trade, a larger export of domestic produce, including cotton and breadstuffs, and of stocks, on one hand, with a smaller present and prospective import of goods in return. The commercial operation has been, then, to throw the balance largely in favor of the country, or, in other words, to make specie the best article of importation. There has accordingly been considerable receipts, and the extent to which this will be carried must depend upon the import trade, since there is little doubt but that food and cotton will go largely abroad. If importers hesitate about ordering goods the proceeds of the produce sales must come back in coin. The internal exchanges, under the same influences, show the same results, since the large remittance of produce, with restricted purchases of goods, are followed by a marked decline in the rates of exchange on New York at all points of the interior, and collections have been made in a manner to greatly ease the city payments.

The political difficulties once settled, there is but little doubt that a period of commercial enterprise and prosperity would manifest itself far in excess of any previous example. The pendency of such serious calamities as dissolution and civil war make all other considerations give place in their presence. The removal of those fears make the evils of mere commercial revulsion appear light, and such periods of depression are generally followed by the boldest enterprises. The troubles of 1850 were followed by the excitement of 1853, and their recurrence in 1854 preceded the great activity of 1856. The country now, with its railroads built, with its working capital larger and more available than ever, is in a position to develop trade and prosperity in a manner heretofore unexampled. On the other hand, should the difficulties unfortunately not be brought to a close, trade will doubtless, to a limited extent, be continued, food will grow, and industry will be productive; whether it can be permanently protected in its development, surrounded by hostile political exigencies, is matter of serious doubt. The Mexican people, thanks to their genial climate and spontaneous fruits of the earth, can live amidst their anarchy. The North cannot follow that example—a peaceful Union or a bloody transit to a state of despotism seems to

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HUNT'S MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

FEBRUARY, 1861.

Art. I.—QUARANTINE REGULATIONS.

Proceedings and Debates of the Fourth National Quarantine and Sanitary Convention, held in the city of Boston, June 14, 15, and 16.—REPORTED FOR THE CITY COUNCIL OF BOSTON.

Quarantine Regulations, as approved by the National Quarantine and Sanitary Association of the United States, 1860.—A Report by A. N. BELL, ELISHA HARRIS, AND WILSON JEWELL.

DR. WILSON JEWELL, of Philadelphia, after an experience of eight years as a member of the Board of Health of that city, and after a careful examination into the practical working of the quarantine laws of the United States, became convinced that they were the outgrowth of dogmas based upon obsolete theories; "that they embarrassed commerce, oppressed the merchant, imposed severe restrictions on the healthy, inflicted cruelties on the sick, and, when rigidly enforced, became the ready means of disseminating and entailing disease and death. These glaring imperfections, and the inconsistency of quarantine enactments with each other in the different States, together with the frequent embarrassments arising from abortive efforts to enforce and apply quarantine regulations, engaged my serious attention. Thus circumstanced, I was prompted to the inquiry—how can a revision of the present ill-advised systems of quarantine laws be most judiciously and extensively effected? A uniform code of regulations, operating alike in all our seaports, and offering the least hinderance to an active commerce, and with a humane regard for the health of the passengers and crews, and the comfort of the sick on board of all vessels detained at quarantine stations, suggested itself as the only correct fundamental principle for accomplishing the necessary reform in quarantine legislation.

"A knowledge of the fact that, with the great commercial nations of Europe, the efficiency of quarantine had assumed a very commanding posi-

tion among the topics in the science of hygiene, and had led to the holding of a *Conférence Sanitaire* in Paris in 1851-2, offered to my mind the idea that a national convention of judicious and well-informed delegates from the seaboard cities of our Atlantic States, might be influential in adjusting disputed points, and become the medium through which commerce could be relieved from the trammels that existing codes of laws had unnecessarily imposed upon it." Following up these reflections, on the 10th of November, 1856, at a meeting of the Board of Health of Philadelphia, Dr. Jewell offered and obtained the adoption of the following resolution:—

"Resolved, That a committee of three, with the president, be appointed to correspond with the Boards of Health of New York, Boston, Baltimore, and New Orleans, on the propriety of calling a convention of delegates from the various boards of health in the maritime cities of the United States, for the purpose of a conference in relation to the establishment of a uniform system of revised quarantine laws."

As chairman of the committee under this resolution of the Philadelphia Board of Health, Dr. Jewell urged the importance of a revised and uniform system of quarantine laws for the protection of the maritime cities of the United States; and in response to his call, the first Sanitary Congress in America was held in the Supreme Court-room, in Philadelphia, May 13th, 1857. The Convention remained in session three days, and resulted in the adoption of a series of recommendations pertinent to quarantine reform. It was at this first meeting of individuals declaring for a reform in quarantine regulations, that the "Quarantine and Sanitary Convention" received its name.—*Introduction to the report of the third national quarantine and sanitary convention.* By Wilson Jewell.

"*Hunt's Merchants' Magazine* for October, (1856,) contains a very able article on the subject of quarantine, written by Dr. A. N. Bell, of Brooklyn. Dr. Bell was formerly a surgeon in the U. S. Navy, and has had favorable opportunities for investigating the subject of which he treats. His view is that infectious diseases are propagated by *things*, and not by persons, and he therefore argues against a quarantine as applied to the latter, who should be cleansed from infectious things, and allowed their freedom. He recommends the erection of warehouses at a sufficient distance from the city, where every infected ship should be unladen, and then purified and allowed to proceed on its voyage, or go to sea again."—*N. Y. Journal of Commerce.*

The article in our Magazine, of which we have quoted the above notice, gave a brief history of quarantine from its origin, identifying it with a belief in the contagiousness of epidemic diseases, which belief was common in the fourteenth century; and forcibly depicted the inconsistency of such false dogmas with the present certainties of science.

"Everywhere dense population, misery, want, and filth constitute the source as well as the contagion of epidemics, but at this very day, the 1st day of September, 1856, almost in the center of one of the largest commercial cities in the world, is gathered the detritus of every sickly clime, to be crammed in and crowded round the quarantine of New York! Do the filthy rags of the tropics—for there has been an infected ship and cargo of them at New York quarantine since June last—grow less "contagious" from the heat, darkness, and confinement of the hold of a ship?

Do the putrid hides of South America and the goat skins of Cape de Verdes become tanned of their poison by wreaking it on the inhabitants of a populous city? Ay! they do. ONE HUNDRED AND FIFTY OF SUCH SHIPS AND SUCH CARGOES are now surrounded by the shores of New York bay!

"But, alas! for the poor passengers and sailors, they are quarantined; many of them quarantined as are the victims of this relic of barbarism, on the Bay Ridge from Fort Hamilton to Brooklyn.

"Yet these ships and these cargoes are now as they would have been centuries ago; they are as the thirty feet deep of slime from the table lands of Abyssinia deposited in the lap of Egypt, as the Hooghly exhaling its putrid remains, or as the gleanings of the Father of Waters, in which crocodiles only can revel—all, all these things lost sight of in the heartless selfishness which dictates a quarantine for persons—a seclusion of the sick and needy! It is an anomaly in the age of Christianity and civilization. In the midst of free schools, free academies, and public charities, we are appalled by an infatuated fanaticism which should only be measured by the ages which gave it birth. Every ennobling sentiment of the human soul revolts with horror at the idea of the seclusion which the enforcers of quarantine would practice upon one in the time of greatest need. It is adverse to every impulse of sympathy—antagonistic to all the kindly emotions of the heart, it inculcates a beastly selfishness and fratricidal barbarism which has, in the nature of causes, always brought upon the enforcers of it a retributory certainty of infliction with the worst horrors of their imagination, in a degree of concentrated strength proportionate to their efforts to restrain it. The barricaders of black death who were infatuated by the hideous terror of judgments inflicted for secret sins, were in some degree excusable in acts measured by the light of science, but that such inhumanity, such remorseless heartlessness and cowardly selfishness should exist and be tolerated now, is surely the most inconceivable incident of barbarism connected with the present age.

"There are at this time agitators for the removal of the New York quarantine from its present site to a greater distance from this city, with the avowed object of effecting a more perfect seclusion of the sick. Surely every individual of common intelligence can now comprehend the practical truth, that pure air is the only real security against epidemics. In all the regulations of quarantine this prime necessity has ever been overlooked; confinement in a foul atmosphere has been the distinguishing feature of sickly ships, quarantine hospitals, and lazarettos, in all ages, everywhere; they convert common fevers into pestilence, which, in their attempt to restrain, they oftentimes render contagious, and they are of all others the most concentrated foci of disease. They constantly avert the attention of the public from the true precautionary sanitary measures, under the absurd impression that epidemics can be shut out or barricaded like unwelcome visitors.

"It is unnecessary now to state that there is no disease to which mankind is heir, contagious or non-contagious, which may not be aggravated by the infliction of quarantine on persons; and quarantines, as heretofore conducted, are necessarily dangerous and disease-producing in proportion to the strictness with which the laws that govern them are enforced. What is the disease which any community would fear from contagion? Small-pox is perhaps the most pre-eminently contagious epidemic that

prevails, but can it prevail in any civilized community in the world? Certainly not. The guard against it from contact is perfect by vaccination, which can be made universal without an item of expense to the city or State. There is no disease compatible with cleanliness which may occur at all, that can be otherwise influenced than aggravated by the quarantine of *persons*.

"But of *things*. Well ventilated and cleanly ships rarely or never have to stand quarantine, no matter what their cargo, or port from which they last cleared.

"Ships which are built without proper provision for fresh air, overcrowded with passengers, or not kept clean, are those which come into port infected. That a large number of such, congregated together, may prove a fruitful source for epidemics, there is abundant evidence: a prominent exemplification now exists at the New York quarantine. And the spread of disease from them can only be measured by the conditions adequate to its support.

"If ships are properly ventilated and kept clean they are the most healthy of human abodes, because they have the freest access of pure air. Ships without proper provision for fresh air sometimes lie for long periods in sickly harbors and take in such cargoes as may render it impossible to prevent their accumulating the seeds of disease; others take on board loads of human beings with closely packed clothing and rubbish, frequently from the vilest dens of corruption; and others are freighted with filthy rags, hides, etc., liable to contain infection to begin with, and sure to generate it if not exposed to the free access of air, which will multiply and break forth with violence commensurate with the conditions which favor it. On arrival, the practice of quarantine is, if any one on board is sick of an infectious disease, not only to detain such one on board to continue inhaling the poison which is destroying life, but to detain all the rest, likewise, till they are also poisoned; the alternative to this is the quarantine hospital, to be surrounded by misery in order to alleviate it! Nor does it end here; the ship and cargo of poison is anchored in the midst of a populous community for the exhalations which arise from her hold to poison the air they breathe—disease and death thus stabbing in the dark, while the victim is under a false sense of security from the traitor he has nourished in his bosom.

"Can any one now survey the quarantine ground and harbor of New York—and other quarantines are just as bad—and view the crape-clad mansions which border the finest bay in the world, without revolting from his inmost soul against quarantines?

"But what should be done with infected ships and cargoes; the infected *things* which entail disease and death? The principles of economy alone will dictate a ready reply. Let warehouses be erected, with proper provision for security and the admission of free air—nature's great disinfectant—at a sufficient distance from the city, and there let every infected ship be at once unladen, and the ship ventilated and permitted to go to sea again.

"And of *persons*, would any one, *can* any one, apply quarantine to himself, and say, seclude them from all human sympathy, from the tender look, the gentle hand, the—

"No, never! *Persons* communicate no infection, carry no epidemics. Banish the very name of quarantine, as applied to them, and require

that they only be detained, when necessary, long enough to secure cleanliness, and prohibit the taking of clothing, baggage, and the like, which has been subject to infection, till it is cleansed and purified.

"Things, and not persons, cause and propagate disease."—*Merchants' Magazine*, Oct., 1856.

Concurrent with the views embodied in the foregoing extracts, Dr. Elisha Harris, of New York, at that time physician-in-chief of the Marine Hospital, was practically working out, so far as possible under existing laws, a system of executive management of quarantine, applicable to all the varying conditions of climate and commerce. In his annual report for the year 1856, the origin and progress of things infected with yellow fever, in contradistinction from the persons to whom the things communicated this much-dreaded disease, Dr. Harris mapped out, as it were, the very paths and by-ways of disease into populous communities. And it is from such reports as this that a system or code of marine hygiene has been deduced of universal application.

The second Quarantine and Sanitary Convention was held in Baltimore, April 29th, 1858. The third, in New York, April 27th, 1859, and the fourth, in Boston, June 14th, 1860.

At the third National Quarantine and Sanitary Convention, held in New York, the following resolutions were adopted:—

Resolved, That the operations of quarantine should not be confined to the warm months of the year, inasmuch as a vessel arriving in mid-winter with small-pox or typhus on board, is as legitimate a subject for quarantine as one arriving in mid-summer.

Resolved, That the adoption, by the commercial nations, of a sound and well-digested code of marine hygiene, and of the necessary measures for insuring its strict enforcement, would tend greatly to alleviate the evils of the present system of quarantine, and promote the comfort of passengers and crew.

Resolved, That this convention appoint a committee to consider and report in what manner the foregoing resolutions may be most effectually carried out.

Resolved, That the committee report, at the next meeting of this convention, (in Boston, June 14, 1860,) specific recommendations of principles and measures of quarantine, as severally applicable to yellow fever, cholera, typhus fever, and small-pox, having reference also to the variations which different localities require.

The report, by Drs. Bell, Harris, and Jewell, is in response to these resolutions. These gentlemen, it appears through the State Department of the U. S. and other sources, obtained the quarantine regulations of all the chief commercial nations. From these, and their own experience, they have presented a report incorporating a sound and well-digested code of marine hygiene. They have preceded this with a brief history of quarantine reform in Europe, and "find, with chagrin, that, after diligent investigation, the quarantine regulations of the United States are nearly identical with the most odious restrictions of Europe thirty years ago. They are in effect the same laws as those imposed by England in colonial times, for the protection of America from "plague or other malignant distempers," and in several of the States it yet remains an indictable offence, with a large penalty, for any person to come into the State from any place infected with a contagious disease. The quarantine laws still presume that certain diseases are communicable from the sick to the well, under all circumstances, and that such diseases are capable of being transmitted to new and distant localities, independent of all conditions.

They also presume that the germs of all diseases regarded by quarantine officials as contagious or infectious, may lie dormant in the systems of persons who are apparently well, but who may afterwards sicken, and then become the radiating centers of infection. Based upon these conclusions, the *time* and *duration* of quarantine pretend to depend upon the real or suspected presence of the apprehended disease, in the *personnel* of any vessel during the voyage and at the time of arrival, the kind of cargo, and whether there has been any communication with other vessels, persons, or things during the voyage. These requirements, however, are of short duration, and usually limited to the warm season of the year. This *résumé* is a fair representation of the quarantine regulations of the United States, while there are no exceptions to the incongruities herein stated."

The report then proceeds to point out the special defects and wants that are acknowledged to exist in all, or at least most, of the ports in the civilized world.

On *quarantine docks and warehouses* they incorporate an able report made to the same Convention, by Drs. John W. Sterling, Alex. H. Stevens, and J. McNulty. Following this—the *specific measures of quarantine, severally applicable to yellow fever, cholera, typhus, and small-pox, with the variations which different localities require*; quarantine hospitals, and the proper care of the sick, location, construction, and the executive management of quarantine hospitals, docks, and warehouses, are all discussed in a masterly manner, and utilized to the simplest comprehension. And then follows the—

CODE OF MARINE HYGIENE.

DECLARATIONS.

1. Every organized government has the right of protecting itself against the introduction of infectious diseases, and of putting any country, place, or thing in quarantine which would introduce infectious diseases; provided, however, that no sanitary measures shall go so far as to exclude or drive from port a vessel, whatever may be her condition.

2. The only diseases at present known, against the introduction of which general quarantine regulations should be enforced, are plague, yellow fever, cholera, small-pox, and typhus fever. As regards plague, the European Congress at Paris had the right to settle the question for the nations there represented; and inasmuch as they and the other nations of the eastern continent have reason to subject the plague to quarantine restrictions, the States of America yield implicit obedience to that convention.

3. All quarantine regulations, of any place whatever, should bear with equal force against the toleration or propagation of disease as against its introduction; and authority to prevent the introduction of disease in any place should be equally applicable against its exportation.

4. All quarantinable diseases are chiefly introduced and propagated by the *material* of commerce; and it is therefore against it that quarantine restrictions should be instituted, and *not* against the *personnel*; excepting, however, persons with no evidence of vaccination, and known to have been exposed to small-pox; such persons shall be vaccinated as soon as

possible, and detained until the vaccinia shall have taken effect; otherwise they may be detained fourteen days from the time of the known exposure.

5. The application of quarantine regulations shall be regulated by the official declaration of the constituted sanitary authority at the port of departure where the malady exists. The cessation of these measures shall be determined by a like declaration that the malady has ceased—after, however, the expiration of a fixed delay of thirty days for the plague, fifteen days for yellow fever, and ten days for cholera.

6. It is obligatory on all vessels to have a **BILL OF HEALTH**; this shall consist of two kinds only, a *clean bill* and a *gross bill*—the first for the attested absence of disease, and the second for the attested presence of disease. The bill shall state the hygienic state of the vessel; and a vessel in a bad condition, even with a clean bill of health, shall be regarded as a vessel having a gross bill, and shall be submitted to the same regime.

7. The plague, yellow fever, and cholera being the only maladies that entail general measures, and place in quarantine those places whence they proceed, the restrictions enforced against these diseases shall not be applied to any other suspected or diseased vessel.

8. The power of applying the general principles of this code, and of acceding to its provisions, are expressly reserved to those nations and governments who consent to accept the obligations it imposes; and all the administrative measures proceeding from it shall be determined by international sanitary regulations, or by a convention of the representatives of the governments which have adopted it.

9. This code shall continue in force and vigor among the governments adopting it for five years, and it shall be the duty of any party wishing to withdraw from its observance, at the end of that time to officially declare his intention six months before the term expires; if there be no such notice, the code shall be regarded as in force one year longer, and thus it shall continue year after year, with all the governments accepting it, until after due notice, six months before withdrawal.

PROVISIONS IN DETAIL

I.—MEASURES RELATING TO DEPARTURE.

10. Measures relating to departure comprise observation, inspection, and the ascertaining of the sanitary state of the place and vicinity; the examination and ascertaining of the hygienic state of the vessel which is about leaving, of its cargo and provisions, of the health of the crew, and, if there are any passengers, of their health also; and lastly, of the bill of health, and all relating thereto. These observations, inspections, and examinations shall be confined to the authorities hereinafter designated.

11. All vessels before lading, must be visited by a delegate of the sanitary authority, who shall be a doctor of medicine, and submit to hygienic measures, if deemed necessary. The vessel shall be visited in all her parts, and her hygienic state ascertained. The authority shall inquire into the state of the provisions and beverages, in particular of the potable water and the means of preserving it; he shall also inquire into the state of the crew, and in general into every thing relating to the maintenance of health on board. If any person has been shipped, having a transmissible disease, such person shall be forthwith discarded.

12. Charges shall not be made until after the visit, and the accomplishment of the measures judged indispensable by the sanitary authority.

13. Captains and masters shall furnish to the sanitary authority all the information and all the evidence, to the best of their knowledge, demanded of them. If the sanitary authority judges necessary, and does not believe himself sufficiently informed by the captain or other persons in charge, he can proceed to a new visit, after the lading of the ship, in order to assure himself if all the prescribed hygienic measures have been observed.

14. These various visits shall be made without delay, and in such a manner as to avoid unnecessary loss to the ship.

15. Vessels carrying a foreign flag shall be visited by the sanitary authority, with the consul or consular agent of the nation to which the vessels belongs.

16. The number of passengers embarking on sailing vessels or steamers, the arrangement of their accommodations, and the quantity of provisions on board for the probable length of voyage shall be determined by the particular regulations of different governments adopting this code. But in no case should the number of individuals to be accommodated on board any vessel, or in any apartment provided for the accommodation of crew or passengers, exceed in ratio one individual to every four hundred cubic feet of air space, together with provision for effectual ventilation in all weathers.

17. Passenger vessels of whatever size, and all vessels carrying sixty persons, or a smaller number, including crew, shall furnish themselves with the necessary medicines and apparatus for the treatment of the most ordinary diseases and accidents likely to happen on board. And it shall be the duty of the sanitary administration of each government to make out a catalogue of the medicines and apparatus, and detailed instructions for their use on board all vessels of this class.

18. All sea-going passenger vessels, and all vessels having a larger number of persons on board than named in the last preceding article, shall carry a doctor of medicine, approved of by the sanitary authority.

19. Bills of health shall not hereafter be delivered until after the fulfillment of the regulations herein specified.

20. Vessels of the navy and revenue vessels shall not be subject to the preceding regulations.

21. In ordinary times, fishing-vessels, pilot-boats, vessels in the coasting trade, of the same country, and canals boats, need not carry a bill of health; the sanitary regulations of this class of vessels shall be determined by the local authorities.

22. No vessel shall have more than one bill of health.

23. Bills of health shall be delivered in the name of the local government by the sanitary authority, *vised* by the consuls or commercial agents, and be of credit in the ports of all governments adopting this code.

24. The bill of health shall contain the name of the vessel, the name of the captain, or master, and the results of the examination, relating to the tonnage, merchandise, crew, and passengers; it shall state the exact sanitary condition of the place, the hygienic state of the ship, and whether there are any sick on board. In short, the bill shall contain all the information that can enlighten the sanitary authority of the port of destination, to give him as exact an idea as possible of the public health at the place of departure and environs; of the state of the ship, her

cargo, the health of the crew and passengers. The environs are those places in habitual communication with the port of departure, and possessing the same sanitary relations.

25. Whenever there prevails at the place of departure, or in its environs, one of the three maladies reputed to be importable or transmissible, and when the sanitary authority shall have declared its existence, the bill shall give the date of the declaration. It shall give the date of the cessation of the same when the cessation shall have been established.

26. In conformity to the provisions of article 6, the bill of health must be either *Clean* or *Gross*. The sanitary authority shall always pronounce upon the existence or non-existence of disease at the port of departure. Doubtful cases shall be interpreted in the most prudent sense—and the bill shall be gross. In regard to passengers, for those whose health may be suspected, the sanitary authority may demand the certificate of a doctor of medicine, known to him to be of good standing, and if any proposed passenger is thus found to be in a condition, comprising the health of the ship or of persons on board, he shall, upon the direction of the sanitary authority, be prohibited.

27. Bills of health can only be considered as valid when they have been delivered within the forty-eight hours last preceding departure. If the departure is delayed beyond this period, the bill must be *viséd* by the authority delivering it, stating whatever change may have taken place.

28. The existence of transmissible or importable disease in the quarantine establishment of any place shall not alone be considered cause sufficient for a *gross* bill of health.

II.—SANITARY MEASURES DURING THE VOYAGE.

29. All vessels at sea shall be kept in a good state of ventilation and cleanliness. And to this end it shall be the duty of the sanitary authority at the port of departure, to see that every vessel is provided with the necessary means, and that captains and masters are sufficiently conversant with the use of those means, for the purposes indicated.

30. Captains and masters shall conform to the instructions of the sanitary authority; otherwise, on arriving, they shall be considered as having a *gross* bill of health, and be treated accordingly.

31. Physicians attached to sea-going vessels shall be considered as the agents of the sanitary authority, and it shall be their special mission to watch the health of the crew and passengers, to see that the rules of hygiene are observed, and, on the arrival of the vessel, to give an account of the circumstances of the voyage. They must also keep an exact record of all circumstances of interest to the public health, meteorological observations, etc., and note with particular care the history and treatment of all the diseases and accidents that occur.

32. In vessels carrying no physician, it shall be the duty of the master or captain to fulfill, as far as practicable, the obligations of the last preceding article.

33. All captains or masters touching at or communicating with a port, shall have their bills of health *viséd* by the sanitary authority; or, in default of such authority, by the delegated officer of the local police.

34. It is forbidden to the sanitary authority at the port where a vessel touches, or holds communication, to retain the bill of health given at the port of departure.

35. In cases of death at sea from a disease of a suspected character, the wearing apparel and bedding which have been used by the deceased in the course of his sickness, shall be burnt if the ship is at anchor; if *en route*, thrown into the sea, with the necessary precaution that they shall not float. Other articles belonging to the deceased shall be immediately aired or otherwise purified.

III.—SANITARY MEASURES ON ARRIVAL.

36. All vessels on arrival shall submit to an examination and questioning. The examination and questioning shall be made by the sanitary authority delegated for that purpose; and the result shall be recorded upon a special register.

37. All vessels, furnished with a clean bill of health, which have had during the voyage no disease or communication of a suspected nature, and which present a satisfactory hygienic condition, shall be admitted to free *pratique* immediately after examination.

38. There being no evidence that any disease was ever introduced into a community by persons who had been quite healthy during the voyage, and were so on arrival, such persons should not be detained under the apprehension that disease may be dormant in their systems. All well persons shall be allowed free *pratique*, excepting only the temporary delay provided in article 4 for smallpox, immediately after arrival.

39. Whenever there are sick on board, they shall be removed as promptly as possible from the vessel to clean and airy rooms on shore, or to a floating hospital moored in a healthy situation. The detention of such persons in an infected ship is obviously most objectionable, and should be allowed under no circumstances whatever.

40. The experience of quarantine shows that the fears of pestilential disease being introduced by the ordinary cargoes of dry and imperishable goods is groundless, and that with the temporary exceptions hereinafter provided, such cargoes shall be admitted to free *pratique* immediately after examination. Nevertheless, there are numerous articles of commerce which should not be landed except under special restrictions, and apart from all populous neighborhoods.

41. The application of sanitary measures to merchandise shall be arranged in three classes:—1. Merchandise to be submitted to an obligatory quarantine and to purification; 2. Merchandise subject to an optional quarantine; and 3. Merchandise exempt from quarantine.

The 1st class comprises clothing, bedding, personal baggage, and dunnage, rags, paper, paper-rags, hides, skins, feathers, hair, and all other remains of animals, woolens, and silks

The 2d class comprehends cotton, linen, and hemp; and *cattle*.

The 3d class comprehends all merchandise not enumerated in the other two classes.

42. With a *gross bill* and existing quarantinable disease on board, or if there has been any such disease on board within the ten days last preceding, merchandise of the *first* class shall always be landed at the quarantine warehouse or other place provided, distant at least two miles from all populous neighborhoods, and there submitted to the necessary measures for purification. Merchandise of the *second* class may be admitted to free *pratique* immediately, or transferred to the warehouse, according to circumstances, at the option of the sanitary authority, with

due regard to the sanitary regulations of the port. Merchandise of the *third* class shall be declared free and admitted without unnecessary delay.

43. In all cases of a gross bill, letters and papers shall be submitted to the usual purifications; but articles of merchandise, or other things not subject to purifying measures, in an envelop officially sealed, shall immediately be admitted to free *pratique*, whatever may be the bill of health. And if the envelop is of a substance considered as optional, its admission shall be equally optional.

44. A foul ship is much more to be dreaded, as a vehicle of introducing disease, than anything she has on board; and vessels in a filthy, unwholesome state, whether there has been sickness on board or not, should not be allowed to enter a crowded port, or to lie alongside a wharf or other ships, until they have been broken out, duly cleansed, and ventilated.

45. If a vessel, though furnished with a *clean* bill of health, and having had during the voyage no case of sickness, yet be found in a bad or infected state, or in a condition which the sanitary authority judges compromising to the public health, the vessel and cargo shall be detained until the case has been considered by the authority; his decision however, shall be rendered within twenty-four hours.

46. If in the judgment of the sanitary authority the vessel requires it, he may order the following hygienic measures:—Baths and other bodily care for the *personnel*, washing or disinfecting means for clothing; displacement of merchandise on board, or a complete breaking out; subjection to high steam, incineration or submersion at a distance, in the sea, of infected articles; the destruction of tainted or spoiled food or beverages; the complete ejection of water; thorough cleansing of the hold, and the disinfection of the *well*; in short, the complete airing and ventilation of the vessel in all her parts, by the use of force-pumps, steam, fumigation, washing, rubbing, or scraping, and finally sending to an isolated anchorage ground. Whenever these divers operations are deemed necessary, they shall be executed in the more or less complete isolation of the vessel, according to circumstances, but always before admission to free *pratique*.

47. All vessels having no bill of health, which, by reason of the place from whence they came, could not obtain one, or in case of accidental loss of bill, shall submit to restrictions according to circumstances, depending upon the judgment of the sanitary authority, in conformity with the provisions herein established.

48. All bills showing evidence of erasure or alteration shall be considered null, and shall incur the conditions of the last preceding article, without prejudice to the proceedings which may be instituted against the authors of the alterations.

49. A doubtful case, reported in an unsatisfactory manner, shall always be interpreted in the most prudent sense. The vessel shall be provisionally detained.

50. Admission to free *pratique* shall be preceded by as many visits to the vessel as the sanitary authority may judge necessary.

51. No vessel can be put in quarantine, without a stated decision of the sanitary authority. The captain or master of the vessel shall be informed immediately after of this decision.

52. A vessel shall have the right, except when they have plague, yellow fever, or cholera on board, of putting to sea, in preference to being

quarantined; and in the exercise of this right, if the vessel has not arrived at the port of destination, the bill of health shall be returned; the sanitary authority, however, shall mention upon such bill the length and circumstances of the detention, also the condition of the vessel on reputting to sea. But before the exercise of this right, the sanitary authority must assure himself that the sick will be taken care of for the remainder of the voyage; and take charge of such of the sick as prefer to remain.

53. Besides the specific measures in the foregoing regulations, the sanitary authority of each country or port has the right, according to article 1, in the presence of immediate danger, to take the responsibility of applying such additional measures as may be deemed indispensable for the protection of public health.

54. Notwithstanding the preceding regulations, whenever the sanitary state is positively healthy, vessels going from one port to another in the same country can, in virtue of the particular sanitary regulations of each country, be freed from sanitary examinations. And, in ordinary times, by virtue of declarations exchanged between the contracting nations, all vessels, proceeding or intending to proceed from one of two countries to the ports of the other, may also be free from examination.

IV.—EXECUTIVE ARRANGEMENTS.

55. Every seaport town requiring the obligations of quarantine, should have a quarantine hospital for sick persons, warehouses for infected goods, with the necessary docks, and a designated anchorage ground for infected vessels; these several parts of the establishment shall be at such a distance and direction from each other, and all populous neighborhoods, infections, and infectable places, as to endanger the life of no one.

56. On the arrival of infected vessels at the quarantine establishment, all well persons shall be admitted to free *pratique* as soon as possibly consistent with the foregoing regulations; sick persons shall be immediately transferred to the quarantine hospital, or to hospital ships, and the vessel unladen as soon as practicable. All merchandise shall be placed in capacious and perfectly secure warehouses, and there freely exposed to the air, and moved from time to time to insure its perfect ventilation.

57. Merchandise coming from different vessels and places in quarantine, at different times, shall be kept separate, and placed as much as possible in different warehouses.

58. Merchandise of the first class (Art. 41) shall be submitted to such measures of purification as the sanitary authority shall judge necessary. No putrid animal or vegetable substances, or substances likely to putrify, shall be admitted into the warehouse. All such substances shall be rendered innoxious or destroyed.

59. The clothes and dunnage of passengers contaminated with the infection of different diseases shall be exposed to ventilation in different places.

60. Each quarantine establishment shall have one or more warehouses specially appropriated to the reception of purified merchandise, to which all merchandise may be removed so soon as it shall be deemed by the sanitary authority admissible to *pratique*.

61. Letters or dispatches shall be so purified that the writing may not be effected. Consuls and representatives of foreign countries have the

right to be present at the opening and purification of letter-bags or other mail packages addressed to them or designed for their country. Post-masters shall have the same right as consuls and foreign representatives.

62. All governments and places adopting this code shall, as soon as practicable, provide the necessary arrangements and appurtenances for fulfilling the obligations it imposes.

63. In case of the arrival of infected vessels at a port not provided with a quarantine establishment, vessels or hulks may be appropriated to the service of the sick, and also for the reception of merchandise; but in such cases they shall be disposed in such a manner as will permit the separation of the sick and assure the best conditions of hygiene, especially ventilation. But under no circumstances whatever shall sick persons be kept in proximity with infected goods. Well persons shall have their liberties as soon as practicable, consistent with the preceding regulations; and all other measures essential for the protection of public health, shall be instituted according to the exigencies of the case, provided they are not inconsistent with the tenor and spirit of these regulations.

V.—SANITARY AUTHORITIES.

64. Sanitary authorities shall be established upon a uniform basis by the countries or governments adopting this code, and shall be composed, first, of a responsible agent of the government, who shall be a doctor of medicine; and, second, of a local sanitary council or board of health.

In addition to the above report, presuming it to be adopted, your committee beg leave to offer the following resolutions:—

Resolved, That this report be referred back to the committee, with directions to negotiate with our National Government, or Department of State, to secure, by convention or otherwise, the national and international adoption of a code based upon the principles hereinbefore set forth.

Resolved, That a committee of one from each State represented in this convention be designated by the delegates of the several States, and appointed by the chairman of the convention, with power to confer with the governments of their respective States for the adoption of such code.*

Resolved, That the local sanitary authorities of the several States and municipalities in the United States be furnished with a copy of this report, and that they are hereby respectfully requested to carry into effect all its specific recommendations, and the general provisions of the code, without waiting for their national and international adoption.

Respectfully submitted,

A. N. BELL, *Chairman*,
ELISHA HARRIS,
WILSON JEWELL,
R. D. ARNOLD,†
H. G. CLARK.

* By vote of the convention, it was Resolved, "That the Committee on External Hygiene have power and be directed to select a suitable person from each State not represented in this convention to aid in carrying out the objects of the second resolution of their report." The following persons were appointed from the States represented:—Gov. Emerson, of Penn.; Dr. Gunn, N. Y.; Dr. Snow, E. I.; Dr. Moriarty, Mass.; Dr. J. A. Nichols, N. J.; Dr. G. B. Guthrie, Tenn.; Dr. Thompson, Ohio; Dr. Kemp, Md.

† It was voted, on motion of the chairman of the committee submitting the report on External Hygiene, "that two additional members, appointed by the chair, should be added to that committee. Drs. R. D. Arnold and H. G. Clark were appointed.

Art. II.—RECIPROCITY—UNITED STATES AND CANADA.

THE Hon. Israel T. Hatch having made a report to the Treasury Department adverse to the reciprocity treaty between the United States and Canada, and a report was made by Mr. Taylor to the same department in a contrary sense, the Committee of the Oswego Board of Trade has made a report sustaining Mr. Taylor, by its chairman, Alvin Bronson, proceeding as follows:—

Before entering upon the discussion of this treaty, a brief allusion to the former commercial relations of Great Britain and the United States, will be appropriate.

The famous Navigation Laws of Great Britain are familiar to commercial men. Their origin was in 1651; their object, the monopoly of her own trade and that of her colonies, to the exclusion of all other nations. By their operation she drove Holland, her principal rival, from the ocean during the last century; and when by treaty she acknowledged our independence, she applied the system to us in all its rigor, subsequently modified a little by an occasional treaty, relaxed and enforced by orders in council, as the exigencies of war, famine, or plenty dictated. Her utmost skill was exerted to cripple and restrict our trade, and ours to counteract and defeat her measures. We followed her enactments step by step, by retaliation and sharp reprisal, down to 1849, when, instead of driving us from the ocean, as had been the fate of Holland, we had, under this damaging warfare, well nigh divided the trade of the world with her, having at the present time equal tonnage with the mistress of the seas.

In 1849, Sir Robert Peel swept these ancient and odious Navigation Laws from the British statutes, with the exception of some slight remnants. Our retaliating measures fell with them—we having enacted a law in the early part of the present century, tendering reciprocal free trade to all, and under it had formed treaties of commerce with several European nations.

Sir Robert yielded this conflict in the most gracious manner possible. While abrogating her Navigation Laws and her long-cherished Corn Laws, Great Britain opened her ports to the admission of most of the raw materials for manufactures, and all agricultural products, free of duty, other than nominal duties to preserve a record of trade; demanding no equivalent, and stipulating for no relaxation of restrictions or duties in return for this boon.

Another commercial movement in the same direction preceded this two years. In 1847, Great Britain withdrew her protection of the trade and her pupillage over her North American colonies, withholding her bounty or discriminating duty on colonial products, and on trade through the St. Lawrence, with the exception of square timber, (which till the last year enjoyed a greatly diminished bounty or protection, now wholly withdrawn;) Canada was left free to regulate her own trade, and construct her own tariff. Availing herself of her newly-acquired power, she raised the duty on British manufactures from 5 to 7½ per cent, and reduced duties on our manufactures from 12 to 7½ per cent, thus abolishing differential duties. She also tendered us by legislation reciprocal free trade in all the commodities of the two countries, which we did not accept.

Such was the condition of things in Great Britain and her American colonies, and such our relations with both in 1854, when the treaty of reciprocity was negotiated and ratified, each province being a party and ratifying for itself.

This treaty provides for the free navigation of the St. Lawrence, Lake Michigan, and the canals of Canada; abrogates the restrictions on the fisheries, and exempts from duty the following natural products, viz., of the sea, of mines, of the forest, of animals and their products, and of the soil.

It is not alleged, so far as regards the free articles of the schedule, that the treaty has not been carried out in good faith by all parties; but Mr. Hatch avers that it has been violated in spirit and letter by Canada, in her tariff of duties on our manufactures, and on foreign products which she has been accustomed to purchase in our markets, and also in circumventing our Debenture Laws, and in thwarting our restrictions on lake coasters. Your committee will address themselves to these infractions of the treaty before they examine its working and its merits.

TREATY VIOLATED.

Mr. Hatch says a treaty broken is a treaty no longer; and proceeds to show that Canada has violated this treaty by raising her tariff of duties on our manufactures, (from 12 to an average of 16 per cent according to Mr. Taylor,) and also by protective and discriminating duties, intended to shut out our manufactures from her markets, and divert our trade from its accustomed channels. This being the great feature of his report, has been sedulously labored and skillfully elaborated through many pages of the work.

Canada, like the State of New York, has embarked in an expensive system of canals, without much regard to revenue. Both parties and both systems were avowed rivals and competitors for the same trade, viz., the trade of each other and the trade of the West beyond and remote from both. New York in this sharp competition has embarrassed herself, and has been driven for relief to direct taxation; but for the Federal Government standing in her way, she would have sought this relief in the more secret and insidious method of taxing imports and consumption.

Canada has even outdone us in extravagance and improvidence, and has well nigh swamped herself; not only by her unproductive canals, but she too, like ourselves, has committed the folly of subsidizing her railroads; not like us, to the tune of three or four, but twenty millions, and all hopelessly sunk.

She must seek relief in revenue or repudiation. More fortunate than New York, the Imperial Government having left the door wide open for indirect taxation, she has taken a leaf from our federal book, and imposed taxes on imported manufactures and other products, almost as heavy as our federal impositions. Hers average, according to Mr. Taylor, 16, while ours average 21 per cent, ours being still some 25 per cent higher than hers. She has also copied another feature from our book—that of protection to domestic industry, to render herself independent of both Old and New England.

Of her revenue tariff, prompted by poverty, we have no right to complain. Protection is a problem for her to solve. Whether it is wise for

a young people, like Canada, with illimitable forests, an ample and growing market at her door for her sawed lumber, and an unlimited market across the ocean for her squared timber, with a soil productive of bread, and in England and the Lower Colonies an ample market, whether it reaches them through the Hudson or the St. Lawrence; with labor dear and capital scarce; whether it is wise for such a people to seek a change of industry by copying from Old or even New England, time must demonstrate.

Mr. Hatch not only charges the infraction of the treaty upon this tariff, but represents it as a breach of faith, an act of ingratitude after receiving the benefits of the treaty, and a great wrong inflicted upon us.

It should be recollected that Canada suddenly awoke from her splendid dream of monopoly to find herself loaded with a debt of fifty millions of dollars, sixteen of which was sunk in the crowning folly of the Grand Trunk Railway; with an annual deficit of four millions of revenue. It matters little to us whether she imposes this deficit upon her consumption, including our manufactures and those of Great Britain, or whether she raises the required revenue by direct taxation; both impoverish her alike, and lessen her ability to purchase and consume our products. But Mr. Hatch presses this grievous wrong and imposition into his service with skill and industry, reiterates the charge with every variety of expression, such as "taxing our labor to build works to rival and rob us of our commerce;" "by imposing extraordinary taxes upon the products of American industry, she is compelling us to bear her burdens, created to sustain gigantic rivalries, worthy of imperial ambition, for supremacy by land and water over our inland commerce, and for the grave influence which thus may be exercised upon our political career," leaving the impression that we are a greatly injured nation, and that, too, by a people on whom we have just bestowed boundless benefits.

In pushing his complaints so far, he has betrayed Mr. Ely into the avowal, in his Congressional speech, *that we pay these duties, not Canada.*

The plain English of all this declamation is, that Canada takes three or four millions of our fabrics and products for consumption, imposing upon herself, through her tariff, a heavy duty.

England, too, is subjected to the same imposition and the same suffering, and bears it with becoming equanimity, and would willingly relieve "the fruits of our industry," as Mr. Hatch has it, from these impositions, by furnishing these three or four millions herself, to be taxed as best suits the interests or theories of Canada.

We desire to treat Mr. Hatch with the respect due to his talents and his position, but if he will indulge in clap-trap he must not ask us to treat it with the gravity of an argument.

If it is a great wrong to impose duties on our manufactures, it must be right to protect and fabricate them for herself; yet here, too, Mr. Hatch finds a fruitful topic of complaint. Here lies the sum and substance of the infraction of the treaty. The parties agree to exchange bread and meat without duty, and forthwith Canada raises her duty on cotton fabrics and whisky, which were not embraced in the free schedule.

Had Mr. Morrel's bill passed Congress, raising duties and imposing specific and protective duties on similar articles, we, too, should have come under Mr. Hatch's charge of treaty breakers.

Although a union exists between Canada East and Canada West, there

is not harmony. The Lower Province found, when the staple and other natural products of Upper Canada were relieved from duty, and from the formalities and expenses of our debenture bonds, that a strong impulse was given to her trade with us, and through us with the Lower Provinces and Great Britain. To counteract this tendency, and force her trade and allure ours to the St. Lawrence, the undue power of Lower Canada, which was paramount in the union, was called into requisition, and arrayed against Canada West and our channels of trade. The gratuitous use of her locks and canals was tendered to the trade of the St. Lawrence, and her discriminating duties were shaped to promote it. This legislation, unfriendly and unwise, as your committee believe, has well nigh proved abortive. The *Montreal Herald* reports the arrival to September 27th, 1854, (the first year of reciprocity,) 253 vessels, tonnage 71,072; and in 1860, 140 vessels, tonnage 82,460, and this is the port at which the provincial trade centers, with the exception of the timber trade of Quebec; no more than a natural increase of trade without the effect of discrimination.

Hr. Hatch's remedy, or retaliation for this hostility from one-half of one of these five contracting parties is, to abrogate the treaty with all; revive our duties; retire from the St. Lawrence; withdraw our debenture facilities from Upper Canada, and thus *compel* her to trade through the St. Lawrence, playing into the hands of Lower Canada; a system of non-intercourse, which would reduce a trade of more than forty to less than ten millions again.

We cannot, in justice to our citizens and our creditors, counteract these measures by the gratuitous use of our locks and canals; but your committee believe sound wisdom dictates that we cherish free trade with all the provinces; counteract their protective and discriminating policy by continued and increased facilities in our own, and to other markets through our channels. We would drive them from the forge and the anvil, to the forest and the saw mill, by buying their boards; and from the spindle and loom, to the plow, by transporting its products through the cheapest channel to the best market. A little patience and good temper on our part will set all right.

Canada West, with her fine climate, rich soil, and commercial capabilities, will grow populous and rich, and soon assert and maintain her rights, and under a liberal and just policy minister largely to our prosperity. She is already taking efficient measures to reform the government and secure the power due to her population.

CANAL AND RAILWAY RIVALRY.

Mr. Hatch inculcates the theory with zeal and industry, that the two Canadas, the British capitalist, and the imperial government, have combined to monopolize the trade of the Far West, by means of canals and railroads, without regard to income or profit.

The same theory has been widely propagated by our railroads, and great merit claimed for counteracting this gigantic monopoly. Mr. Hatch says, page 34:—"The changes to be produced by this grasping monopoly will be developed with the rapidity characteristic of modern times. They will include the whole system of our commercial industry."

Again, page 35, "This vast commercial struggle, where monopoly is the end to be gained, must terminate in a colossal combination of Amer-

ican capital and ability, or the field must be abandoned to their royal rival." Here we have eloquent declamation to propagate a bald fiction.

Canada, one of the British provinces, has inaugurated a system of canals with her own means and her own credit, "out of all proportion to her wants," as Mr. Hatch avers, looking to the trade of the West.

New York, one of the United States, has done precisely the same thing; the magnitude of her works is out of all proportion to her wants. The railroads of both Canada and New York are constructed and managed by private capitalists, and both upon the same scale, and looking to the Far West for patronage; the New York roads subsidized inoderately, and the Canadian largely, by the local governments. All were gainful schemes; many have proved delusive ones; none have been prompted by politics or patriotism. It is believed that more British capital is embarked in our railroads and canals, seeking Western trade, than in similar Canadian works.

The British Government constructed the Rideau Canal, 127 miles in length, soon after the war, from her military chest; it is in no sense a rival for trade. The Commissioners of the Board of Works say in their report, December, 1859, page 23, that "the work was handed over to this department in a dilapidated condition, demanding a large expenditure of money; that its revenues are derived chiefly from local traffic, lumber, iron ore," &c. Herein is comprised the much bruited royal monopoly, the imperial prodigality to ruin our trade and drive us from the field.

It should be remembered, if all these fears are realized; if British capital could be enlisted to build and maintain roads and canals, and tender them to commerce gratuitously, and thus furnish the cheap channel for trade between the Atlantic and the lakes, even then the *major* interest of the lake region would be promoted—the *minor* interest only injured. The agriculturist, the great producer and consumer, would enjoy this bounty, this free road to market, while the defeated lines of commerce would suffer a diminution of patronage, and be compelled to turn over their supernumeraries to the more favored occupation.

The Rochester boat-builder and the Buffalo and Oswego boatmen must turn farmers, but the lake coaster would still pursue the trade to Montreal and Quebec, and the Atlantic ship would compete for it at Quebec and Portland. New York city might suffer, but Detroit and Milwaukee need not be alarmed. The day for protection and monopoly has gone by. The Grand Trunk, with its magnificent and alarming proportions, must sustain itself or sink. Canada is paralyzed, and cannot come to its relief. British capital will no longer bear depleting, and Great Britain, under a revised and liberal policy, has secured a large share of the trade of our continent, and cares not whether it reaches her through the St. Lawrence, the Hudson, or the Chesapeake; knowing, as she does, that the more numerous its competing channels, the more they minister to the prosperity of herself and her colonies.

The Montreal *Witness*, in a recent issue, says:—"The affairs of the Grand Trunk Railway appear to be approaching a crisis, and it is generally anticipated that the whole concern will have to be sold for debt." The same article attributes its misfortunes to bad and corrupt management, and they might have added appropriately, from Mr. Hatch's report, that they transported flour from the Mississippi to Portland for prices fabulously low.

In discussing the merits and working of the treaty, the following heads may be disposed of briefly, as it is believed nobody complains of them but Mr. Hatch, viz., the Fisheries, the St. Lawrence, Animals, and Minerals.

In relation to the fisheries, all will admit that a subject of national disquietude has been disposed of. A branch of industry, though regulated by treaty, demanding to be watched over by the men-of-war of both contracting parties, was troublesome and dangerous. The duty of this hostile armament was to keep the fisherman to the prescribed line in pursuit of his game, which line was on the ocean at a definite number of leagues or miles from headlands and bays. A better contrivance to embroil friendly nations in war could not have been devised by the wit of man. It matters but little who catch the fish, provided the consumer can have them at a cheap rate, free from duty. As a school for seamen, its effects are neutralized, when each maritime nation protects its own fisheries.

Of the St. Lawrence, while exclusively navigated by Great Britain, it has been the fashion to disparage its value and importance, on account of its high latitude, environed and crowded by islands, ice-bound and befogged for half the year. But since we have acquired a right to this channel by treaty, by abrogation of the English Navigation Laws, and by modern international law, as expounded at Vienna by the Congress of Sovereigns in 1815, it is pertinent to inquire whether it is as worthless as Mr. Hatch and his coadjutors would make it. The American lakes and their outlet occupy a section of that belt which carries forward the entire commerce of the globe; their latitude not as high as that of the English Islands, or the Baltic Sea. The navigation of Ontario and the St. Lawrence is *practicable* as long as that of the Hudson, and is *safe and profitable* for the same period of the year, as that of Lake Erie and the Erie Canal. The summer temperature of the North invites and allures the traffic of the valleys of the lakes, and the Upper Mississippi, through the Gulf of St. Lawrence, while the fervid heat of the South repels this trade through the Gulf of Mexico. Winter reverses this traffic. Nature has established reciprocity among all the channels of commerce, and forbids our impeding any by selfish and hostile enactments.

For most of the period since we became a nation, Quebec has been the field of more traffic, and the resort of more foreign tonnage, than any other port on the continent. When the St. Lawrence was improved at great expense, the inland and coasting trade alone was provided for. It is estimated by the Board of Works that another foot of water may be obtained through this channel at the moderate cost of a million of dollars, conforming it in depth to the Welland Canal, greatly promoting the lake and Atlantic trade, and rendering it far more effective than the gratuitous use of locks. It cannot be doubted that with its slight improvement, and some modification in the structure of our lake coasters, a large amount of tonnage will seek the Atlantic markets through this channel, during the summer, as regular traders, and a much larger amount, as winter approaches, to secure occupation in milder climates. But monopoly is inhibited by climate to any and all routes.

The *Detroit Tribune*, in a late issue, gives a list of lake coasters seeking the Atlantic for employment, comprising ten barks, five brigs, forty-one schooners, one propeller, and eight tugs within the last two years;

total tonnage of all, except the tugs, 18,085 tons. Two of the barks and one schooner are Canadian vessels. Two of the schooners only have been wrecked.

Total entries of sea-going vessels for Canada, inwards and outwards, for the year 1859, British, colonial, and foreign vessels included, number 3,333; tonnage, 1,282,233 tons.

Of animals and their products, it will be sufficient to say, that the exchanges between Canada and ourselves seem to balance each other with remarkable accuracy. We copy from Mr. Hatch's tables:—

IMPORTED INTO CANADA.		IMPORTED INTO UNITED STATES.	
1856.....	\$2,896,838	1856.....	\$2,375,888
1857.....	2,184,839	1857.....	1,974,616
1858.....	1,464,873	1858.....	2,231,786
Total.....	\$6,496,050	Total.....	\$6,581,690

In this trade there seems to be sufficient reciprocity to satisfy the most captious.

MINERALS.

Your committee are not aware that any other minerals than coal are exchanged under the treaty. We subjoin the amount of imports and exports for the last three years of the treaty:—

IMPORTED INTO CANADA.		IMPORTED INTO UNITED STATES.	
1856.....	\$448,984	1856.....	\$84,228
1857.....	509,494	1857.....	189,894
1858.....	324,374	1858.....	93,405
Total.....	\$1,322,852	Total.....	\$367,527

Here we find three-and-one-half times as much coal exported to Canada from the mines of Pennsylvania, Ohio, and perhaps Northern Virginia, as are imported from England and Nova Scotia to our Atlantic ports. Yet Mr. Hatch would invoke from the federal government a protective and prohibitory duty on this diminutive quantity of coal; thereby enhancing its cost, and stinting the supply to New England of an article of prime necessity in her rigorous climate, denuded of timber, and destitute of this mineral, so important an element in her manufacturing industry. Mr. Hatch insists that we may impose these duties on our citizens without any fear of similar impositions by Canada on hers. He says, she, too, has a rigid climate, her forests are fast disappearing, her minerals are all metals, and demand our coal for smelting them; and it would have been in harmony with his report, if he had added her future great manufacturing cities, which are to grow up under protective fostering, must have coal. And, by the bye, it occurs to us to inquire how New England, with her fuel heavily taxed, is to compete with Canadian manufactures protected by a provident and paternal government. How is she to furnish the "fruits of her industry," as Mr. Hatch has it, cheap enough to bear Canadian taxation?

This treaty, in minerals, works in this wise:—We import into New England, \$120,000 worth of coal per annum. The Federal Government loses duty, probably on half this amount, or 20 per cent on \$60,000, being \$12,000 per annum, while we open a trade in coal through the canals and railroads of New York, Pennsylvania, and Ohio, of nearly half a

1860.		1861.		Specie in	Total
Received.	Exported.	Received.	Exported.	sub-treasury.	in the city.
Jan. 7.....	\$85,080	1,482,857 1,388,100*	.....	\$3,645,437	\$28,485,000
14.....	\$1,788,666	88,482 1,446,219 1,400,000*	.....	2,584,455	29,045,300
Total.....	1,788,666	173,562	5,667,176	.....	.....

The export of specie of course stopped short, and the metal flowed into the port from both East and West, raising the amount in the city some \$3,000,000 between December 15 and January 12. But there were also considerable sums in the savings banks and other institutions than banks and Treasury. The amount received in the five weeks to January 12, was, it appears, \$13,467,109, without any exports. The amount in the banks and Treasury increased in the same time \$8,000,000, leaving \$5,400,000 that went elsewhere. The foreign gold pressed upon the mint, since, under present laws, it is not a legal tender in the foreign shape, although an effort was made to have the law altered in that respect. The operations of the New York assay-office were as follows :—

NEW YORK ASSAY-OFFICE.

Foreign.				United States.			Payments	
Gold.		Silver.		Silver.				
Coin.	Bullion.	Coin.	Bullion.	Gold.	Coin.	Bullion.	Bars.	Coin.
Jan. 14,000	18,000	11,200	14,000	2,478,000	1,800	20,000	647,000	1,910,000
Feb. 5,000	28,000	6,500	24,000	951,000	....	7,500	932,000	90,000
Mar. 8,000	15,000	23,400	5,500	267,000	1,100	2,500	180,000	142,500
Apr. 8,000	82,000	14,500	10,000	183,000	3,700	3,800	187,000	70,000
May 11,200	20,800	25,500	18,000	176,000	7,000	16,500	230,000	45,000
June 12,000	19,000	10,000	4,000	147,000	1,750	2,750	158,000	38,500
July 9,500	18,000	12,800	8,000	159,500	1,200	3,000	140,000	72,000
Aug. 12,000	14,000	16,000	14,100	208,000	1,000	3,900	190,000	79,000
Sept. 13,000	41,000	7,500	14,000	323,000	....	8,500	350,000	57,000
Oct. 7,000	10,000	6,490	38,000	1,183,000	1,000	12,600	300,000	958,000
Nov. 14,000	13,000	30,800	9,000	3,423,000	....	27,000	67,000	3,500,000
Dec. 3,622,770	875,890	90,000	20,000	2,776,600	88,000	89,820	.....	7,563,170
'60 3,736,470	998,690	251,600	78,600	12,275,100	106,550	200,070	3,381,000	15,822,000
'59 125,000	147,000	431,580	79,900	4,005,600	14,400	99,320	3,971,000	1,629,100

The deposits of United States gold had become large in October for turning into coin, and still larger in November. In December the arrivals from abroad doubled the applications, and for that month \$7,563,170 was required in coin raising the aggregate for the year to ten times that of 1859. The mint could not respond to this demand, but its operations were as follows :—

UNITED STATES MINT, PHILADELPHIA.

Deposits

Coin

cerned, is Indian corn and its products. During the year ending June 30, 1859, we exported to Canada, corn and its products comprising:—

Indian meal, lard, pork, hams, and bacon, of the aggregate value of...	\$1,180,878
Same articles to the other British American provinces	1,127,205
Together.....	<u>\$2,308,078</u>

This agricultural product goes into consumption, and is expended largely in their fisheries, lumbering, and shipping, and for the manufacture of whisky. This corn and its products go far toward the payment of our imports of the products of the forest; which in 1858, amounted to \$3,290,383—and this, too, is an article of consumption. An exchange as beneficial to both parties as an exchange of commodities between the tropics and the temperate zone.

Corn is produced in great abundance, and at small cost on the rich bottoms of the Ohio, the Wabash, and the Illinois, and matured by a warm climate before the frost overtakes it. While the pine lumber, a necessary article of consumption in building, fencing, and manufactures, is produced in a high latitude, on a sterile and cheap land.

On lumber, the Federal Government has sacrificed a small amount of revenue, while, by its freedom and expansion, New York has acquired a large canal revenue, and her citizens extensive and profitable occupation.

Our lake shipping share most largely in its transport, and our canals monopolize it.

There is still another exception to this rule, another portion of this exchange of breadstuffs which is reciprocal and goes into consumption. Canada East consumes largely of the spring wheat of Wisconsin and Illinois, taking it partly in the berry direct from these States, and partly in flour ground in the State of New York. She prefers this wheat to the fine article from Canada West, partly from habit and partly from economy. She has been accustomed to raise her full supply of this description of grain, but at times, from failure of crops and diminished culture, she probably draws half her supply for a population of a million from abroad. A cheap article, exempt from duty, has allured her to our prairie States for this supply. On the other hand, New England consumes largely of the fine wheat and flour of Canada West, since her accustomed supply of Genesee has failed, and since its exemption from duty has brought it within her reach.

From an exhibit of the trade and commerce of Toronto, (C. W.,) for 1859, we make the following extracts:—"The demand for our flour during the past year, has been from Montreal and Quebec for the lower grades, while for fancies and extras, purchases have been mainly made for Boston and other New England markets." Again, "The manufacturing districts of the New England States require a description of flour superior to any that has hitherto been produced in the West."

Of barley it says:—"Over 167,000 bushels have been exported the last year; the purchases for export were mainly with a view to the Albany market," (breweries.)

"The import of Indian corn at this point last year, for the manufacture of whisky, amounts to 143,524 bushels, valued at \$100,343." Here is reciprocity; with this difference, we obtain the best beverage.

Revive the duty of 20 per cent on bread, yielding but a paltry revenue

to the Federal Government, an extensive and beneficial trade would be broken up. Canada East would be compelled to eat a white and a dear loaf, while New England would have the alternative of a taxed loaf, or a brown one. Illinois and Wisconsin would flood their single market, already overstocked, with spring wheat. And here we may repeat the question, how is New England to compete with the protected manufactures of Canada, with her bread taxed, as well as her fuel? It is apparent that free trade in breadstuffs, a subject so fruitful of cavil and clamor, is not so barren of benefits as a superficial observer would imagine. Their exchange for consumption, so far as it goes, is highly beneficial to both parties, the remainder having the choice of the cheapest and best channel to a distant market, exempt from duty, and free from the formalities and expenses of our debenture system.

The free importation of Canada lumber is fraught with benefits to all. On our part, the carrier, the canals, and the consumer share largely and directly in these benefits, and the manufactures of New England and New York incidentally. Canada finds appropriate and profitable occupation in its preparation and transport, and derives from its sale an ample fund with which to purchase from us her agricultural implements, her building materials, and staple fabrics for consumption.

Your Committee are not familiar with the lumber trade on the seaboard, but observe in the statistics of trade that we export to the Lower British North American Provinces, pitch pine, locust, hickory, black walnut, and oak, which they do not produce; and it is believed that Maine finds some equivalent in the free use of the St. Johns River, for the competition of New Brunswick in the pine lumber trade.

Our debenture system Mr. Hatch treats as a proffered boon, rejected and thwarted by Canada. So far from a boon, its aim and object was to promote our carrying trade, by alluring to our Atlantic ports the products of other nations, to be again distributed to their respective markets, exempt from duty, other than a commission or tax of 2½ per cent. Its operation was extended to Canada and New Mexico by act of Congress, August, 1846. Now, inasmuch as Lower Canada has endeavored, by discriminating duties and protective laws, to annul and counteract the operation of this debenture system, and force Canada West, as Mr. Hatch says, to import her tropical products by a circuit through the St. Lawrence, of a thousand miles, therefore he would annul the law, and *compel* Upper Canada to import and export through this circuitous channel, thus playing into the hands of Lower Canada, and yielding this valuable branch of the carrying trade.

We subjoin extracts from official tables of Canada "Trade and Navigation" for 1859, page 199:—

Imported through the United States under debenture bonds, in value.	\$4,546,491
Of which pays 25 per cent duty	\$28,652
" 20 and 15 per cent.....	4,278 287
" 10 and 5 per cent.....	120,547
Purchased in the United States, products of other countries	5,351,865
Foreign products.....	\$9,898,356
Products of United States.....	12,237,541
Of which pays 25 per cent duty.....	\$140,611
" 20 and 15 per cent duty.....	2,487,251
" 10 and 5 per cent duty.....	506,724
Free goods.....	8,040,225
Total imports.....	\$22,135,897

COASTING TRADE.

By referring again to report of the Canadian Board of Works, page 143, we find the tonnage of the lakes and St. Lawrence for 1859, divided as follows, viz. :—

By referring again to report of "Trade and Navigation" of Canada for 1859, page 275, it appears that the coasting trade to and from 66 Canadian ports, is divided as follows:—

(Ferries excluded.)

We find in United States "Commercial Relations," vol. I., pages 56 and 57, the following remarks; after alluding to the restrictions on trade with the British West and East Indies, it says:—"With the North American provinces, however, a system of the most liberal and unrestricted character has been adopted, which, to a great extent, places commercial intercourse between the United States and these provinces on the footing of an unfettered coasting trade." Passenger vessels are allowed to land on the opposite coasts, from point to point; passengers with their baggage, family stores, implements of trade, &c.

The treaty of reciprocity, by opening the navigation of the St. Lawrence, the canals, and Lake Michigan, has still further relaxed these restrictions. Our vessels, passing down the St. Lawrence, or through it to the ocean, are obliged to pass several Canadian ports of entry, and are allowed to lighten at the locks, and reload at Montreal or Quebec; or pass the locks partly loaded, and fill up below for a foreign voyage. While through the intervention of the Canadian railways, a coasting trade is sanctioned, which would otherwise be unlawful. A voyage from Michigan to New York in a Canadian bottom would not be lawful, but a voyage from Chicago to Port Sarnia, Windsor, or Port Colbourn on lakes Huron and Erie, and again from Hamilton or Port Dalhousie on

Lake Ontario to a New York port, would be lawful, though the identical goods may have constituted the freight for both voyages, having passed from the upper to the lower lakes by a railway. The same license or latitude would be extended to an American bottom if similar cases should occur, which, from the nature of the trade, are not so frequent.

From the tenor of Mr. Hatch's argument, the impression is left on the general reader, that this is a violation of the spirit of the treaty, whereas, it is a mutual relaxation of coasting restrictions, a violation of the spirit of the British navigation laws, a remnant of barbarism two hundred years old—a remnant which it is believed every commercial man on either side of the lakes would be glad to see abolished; and it is a subject of regret that the treaty did not abolish this troublesome restriction, at least between us and British North America.

The growth and magnitude of our trade with these Provinces is so well known that it is not deemed necessary to load this report with figures and statistics. We only subjoin the aggregate of this trade at three distinct and well defined periods in its history. The first, 1830, when the British navigation and our retaliatory laws were in full operation. The second, 1840, when a relaxation of these measures, produced by Mr. McLane's negotiations, had operated for ten years; and the third, in 1855, when the debenture law had been in operation nine, and the treaty of reciprocity two years:—

1830, Imports from British North American Provinces.....	\$650,303
“ Exports to same.....	3,786,373
Total.....	\$4,436,676
1840, Imports.....	\$2,007,767
“ Exports.....	6,093,250
Total.....	\$8,101,017
1855, Imports from Canada.....	\$12,182,314
“ “ “ other British N. Am. Provinces...	2,954,420
Total imports.....	\$15,136,734
“ Exports to Canada.....	18,720,344
“ “ other British N. Am. Provinces	9,085,676
Total exports.....	\$27,806,020
Imports and exports total.....	\$42,942,754

It will be perceived that the amount of exports over imports are sufficient to satisfy those who deem the balance of trade an important element in commercial exchanges.

The discussion of canal and railroad rivalry, and the debenture and coasting laws, does not belong to our subject, but has been forced upon us by Mr. Hatch, who has pressed them into his service in his crusade against the treaty.

REVENUE.

On the loss of revenue by the treaty, Mr. Hatch has discarded largely, has taxed his imagination to swell it to a fabulous amount; he has, by a refinement of cruelty, tantalized us by parading the millions we might have pocketed if we had made the free goods pay duty, millions which we could, by no possible scheme, ever touch. The truth is, the little rev-

enue we did enjoy before the treaty would, under augmented duties and multiplied restrictions, have dwindled to a mere bagatelle.

We have shown incidentally, that the small loss of revenue to the federal government on mineral and forest products has been restored many fold to the frontier States; that products of the soil in transitu would escape taxation under our debenture law. If New England could be made to yield to the federal treasury every fifth loaf of her Canada bread, and every fifth bushel of her Nova Scotia coal, it would not prove a financial achievement to excite much exultation. It is true, as Mr. Hatch avers, we have numerous custom-houses on the frontier, and he might have added on the seaboard also, attended with heavy expenses, and yielding little or no revenue. This is incident to our revenue system; one office collects revenue from the honest importer, while ten officers, with their cutters and numerous officials, are stationed as sentinels, not to collect, but to protect revenue by guarding against fraudulent importations.

We know of no other remedy for this evil on this frontier, than the adoption of the German Zollverein, which is said to be operating over a population of more 30,000,000. It is, in effect, like collecting the revenues of the lake frontier at Quebec and Portland, and distributing them per capita over the whole region; abolishing custom-houses by the hundred, and disbanding armies of public functionaries. Some of the most enlightened statesmen of Canada advocate this reform.

If our exposition of the terms and working of the treaty is a faithful one, it proves that there has been no infraction of it, that its benefits have proved reciprocal, that the unfriendly, and, as we believe, unwise legislation of Canada, has well nigh proved abortive, and will probably work its own cure. We would remove all coasting restrictions by legislation or by treaty. After this, if the contracting parties can devise other and better means of carrying on their governments than through the custom-house, then a system of perfect freedom and reciprocity of trade may be inaugurated; then British North America will yield to us all the benefits of federal States, without the tax and burthen of their government.

Widely different are the results of Mr. Hatch's labor; he finds a broken treaty, conferring great benefits on one party, and inflicting great injuries upon the other. In his zeal to make out a case, he has involved himself in numerous absurdities and contradictions. On the one hand he alarms us by an appalling conspiracy to monopolize the lake trade, and turn all through the St. Lawrence; on the other, scouts this navigation as worthless, and says Canada sends to our markets six times as much breadstuffs as the British, through this protected channel. He abuses Canada for "taxing the products of our industry," which means, when explained, for taxing herself when she consumes our fabrics, and still more, when she refuses to take them, and fabricates for herself. He berates her for overwhelming us and our markets with her products, and still more when she withholds and attempts to send them down the St. Lawrence, and that, too, by the gratuitous use of her locks. He complains that Canada West is obliged, by Provincial discriminating and specific duties, to import her tropical and other products through the St. Lawrence, by a circuit of a thousand miles, and at the same time proposes to withhold our debenture facilities, by the operation of which she can es-

cape this imposition and avoid this circuitous voyage. It would seem his commission does not restrict him to the exposure of abuses, but comprehends their cure also. For this purpose he would repeal the Debiture Laws, enforce the coasting restrictions, re-impose duties on the list of free goods, and that, too, perhaps through the agency of the Secretary of the Treasury, (as "a treaty broken is a treaty no longer,") without waiting the ten years prescribed by the treaty, or the action of the treaty-making power. He would retrace the path of commercial reform, go back a hundred years, to the age of restriction, retaliation, and non-intercourse, when two ships of different national character were required to perform the work of one, thus doubling the labor and cost of exchanging commodities.

Art. III.—COMMERCIAL AND INDUSTRIAL CITIES OF THE UNITED STATES.

NUMBER LXXVIII.



BOSTON, MASSACHUSETTS.

INFLUENCE OF RAILROADS—POPULATION—VALUATION—MACHINE IMPROVEMENTS—CONCENTRATION—BOSTON THE CENTER—INDUSTRIAL STATISTICS—EMPLOYMENT FOR WOMEN—ALL NEW ENGLAND—NEW ENGLAND SOCIETY—ITS ORIGIN—OPERATIVES—SALES—SUSPENSION—RESUMPTION—EXTENSION OF BUSINESS—THE PAST YEAR—MANUFACTURING ACTIVITY—BOSTON SHIPPING LIST—MARKETS—SHIPPING—MILLS—THE COMING YEAR—FOOD AND MATERIALS—BOOTS AND SHOES—SHIPPING INTEREST—COTTON—DOMESTICS—FISH—FLOUR—GRAIN—WOOL—LEATHER.

THE annual reports of the trade of Boston show a considerable degree of prosperity, indicative of the concentration of business that is produced by the influence of railroads. The population and valuation of the city has been as follows:—

POPULATION AND VALUATION OF BOSTON.

	Population.	Valuation.		Population.	Valuation.
1800	24,987	\$15,095,700	1840	98,383	\$94,581,600
1810	33,787	18,450,500	1850	136,881	180,000,500
1820	43,298	38,289,200	1855	160,508	241,982,200
1830	61,392	59,586,000	1860	177,902	311,978,663

The valuation in the last ten years has increased \$131,900,000, and in the last five years the increase has been greater than the whole value of the city in 1830, up to which time the railroads had not come into operation, either in Boston or in those remote sections where of late such large markets for New England manufactures have grown up. The improvements in machines, and the concentration of capital in Boston, have, as it were, constantly attracted thither raw materials to be wrought up into goods, which, mingling with the New York importations, have found sale for Massachusetts labor in every section of the country to which rails penetrate. While the surrounding States have been large producers of the goods owned in and shipped from Boston, there has been apparently a constant concentration of labor in the city. The census returns of the industrial statistics of Boston, of which the following is a summary, show the number of establishments, amount of capital, value of articles used, and the yearly products in each ward:—

Wards.	No. estab-lishm'ts.	Capital employed.	Materials used.	Products.	Men.	Pay of men.	Women.	Pay of women.
1...	12	\$467,000	\$700,000	\$1,211,000	245	\$9,020	62	\$800
2...	53	1,802,000	2,620,000	4,669,000	1,908	52,890	11	185
3...	312	2,303,000	5,033,000	8,415,000	2,730	100,660	619	10,194
4...	218	2,484,000	3,474,000	7,258,000	2,599	78,480	2,160	34,841
5...	12	62,000	78,000	256,000	115	5,000	24	330
6...	43	120,000	341,000	509,000	260	8,600	2	25
7...	77	969,000	2,501,000	3,697,000	1,120	35,100	1,055	15,101
8...	69	839,000	573,000	1,979,000	727	37,000	208	4,605
9...	7	28,000	106,000	135,000	49	8,700	5	70
10...	62	374,000	365,000	833,000	535	18,000	29	384
11...	30	790,000	558,000	2,270,000	737	49,000	78	1,566
12...	42	2,617,000	3,473,000	6,710,000	2,385	69,400	56	904
Total.	931	\$12,845,000	\$19,852,000	\$37,947,000	13,410	471,700	4,309	\$68,403

It will be seen by the above that the monthly pay roll for the manufacturing establishments of the city is, for men, \$471,700; for women, \$68,403. This amounts to \$6,481,206 a year. The above does not include the great building interest of the city—carpenters, masons, painters, and slaters not being reported, except in two or three wards, where their numbers are small. The largest number of establishments is in ward 3, and here, too, the amount of products and the number and monthly pay of men are the largest. In ward 4 there is the largest number of persons employed, and in ward 12 the capital is the largest. In ward 2 ship-building was not carried on to any great extent for the year covered by the report, and consequently the aggregate is much smaller than it would otherwise have been.

The aggregate of products, it will be seen, is \$37,947,000, but there are some omissions, which would have swelled the amount to upward of \$40,000,000.

One important omission is that of the great Boston Gas Company, which employs a large number of men and annually produces gas to a heavy amount in value.

The productions of the dentists of Boston, of whom there are 95, have been also, except in a few instances, altogether omitted.

These city manufactures, as we have said, are, however, not an exponent of the vast interests which Boston has in the products of the New England States, for most of which she furnishes the capital. Of late, efforts have been made to restore to Boston the control of the sale of her goods, by ceasing to send them to New York and other cities through the hands of agents, and attracting buyers there. This is described by Lorenzo Sabine, Esq., Secretary of the Board of Trade, as follows:—

The New England Society was incorporated in 1826,* with ample powers and important privileges; and its records show that during the thirty-four years of its existence, some of the most honored men of Massachusetts and of New England have assisted in the direction of its affairs. Its income from real and personal estate is limited to six thousand dollars annually, by a provision in the charter; but it may promote and encourage domestic manufactures of every description, as well as mechanical skill in every department of industry, by public sales and exhibitions of the products of the arts, by awarding premiums for new in-

* The persons named in the charter are Patrick T. Jackson, Jesse Putnam, John Doggett, Henry A. S. Dearborn.

ventions and for the best specimens of skill, by inducing any new discoveries which may be made in other countries, and by collecting models of inventions at home or abroad, and communicating the same to the manufacturers and mechanics of New England; and generally, by the adoption of such measures as the members of the corporation may think will at any time tend to the advancement of mechanical and manufacturing skill; while two public sales may be held annually, without payment of the tax imposed on goods sold at auction, on the single condition that the articles offered at these public sales shall be of the growth and manufacture of the United States. Originally, its officers were a president,* ten vice-presidents, twenty-five directors, a treasurer, a secretary, and two standing committees; but in 1829, the number of vice-presidents was reduced to four, and of directors to twelve.

Its earliest measure was the establishment of periodical exhibitions and sales of domestic goods by auction in Boston, the city government granting the free use of Quincy Hall for the purpose. The first sale was on the 11th of September, 1826, and the second on the 24th of the following month. These were succeeded by annual or semi-annual sales for several years, with beneficial results. Indeed, the plan of disposing of manufactures by auction brought American fabrics into notice; called public attention to the manufacturing interest; attracted buyers to the city from all parts of the country; secured a home market; and fixed the price of the staple productions of our looms in a manner not then to have been otherwise accomplished. The fairs and sales were, however, suspended in 1832, "owing to temporary circumstances, and inactivity on the part of the society," and were not resumed until 1859.

In 1840, a committee appointed the previous year to devise ways and means for the promotion of the interests and objects of the society, made a report, in which they remark that its charter is "a great boon," and of vast importance to the people of New England, and should be estimated and preserved; and they recommended the most rigid "observance of all the formalities and technicalities" of that instrument, and of the by-laws, as well as the keeping of accurate records of their transactions, in the belief that the time would come when the powers and privileges granted by the Legislature, "might be exercised with manifest advantage." In the judgment of the officers† of the past year, the period thus anticipated has arrived. At the annual meeting, January 12, 1859, a committee of five‡ were charged with the duty of inquiring into the expediency of re-establishing the semi-annual sales; and, on the 21st of that month, a report was made, in which all concurred in advising the measure. The result was the appointment of a second committee of fif-

* Levi Lincoln (then Governor of the Commonwealth) was the first president. His successors are Nathan Appleton, (in 1835;) Abbott Lawrence, (in 1848;) David Sears, (in 1852;) Samuel Lawrence, (in 1855;) Thomas G. Cary, (in 1856,) and Deming Jarvee. (in 1860)

† Of the officers elected in 1826, twenty-three have laid down mortality.

‡ The officers elected January 12, 1859, were as follows:—

President—Thomas G. Cary.

Vice-Presidents—Levi Lincoln, William Sturgis, James W. Paige, Deming Jarvee.

Directors—Thomas Motley, James Read, John A. Lowell, James M. Beebe, Edward Brooks, Henry Hall, James K. Mills, Edward H. Eldridge, William Appleton, Samuel Torrey, Francis Skinner, Amos A. Lawrence.

Committee on Accounts—Samuel Torrey and Patrick T. Jackson.

Secretary—Peter Butler.

Treasurer—Abbott Lawrence.

§ Thomas G. Cary, J. Wiley Edmands, Nathan Appleton, Benjamin E. Bates, James W. Paige and Amos A. Lawrence.

teen,* to correspond with the manufacturers of New England, in order to ascertain whether a sufficient quantity of goods would be contributed to attract buyers, and if so, to make the necessary arrangements.

The answers afforded such encouragement that the committee proceeded to appoint the time and place for a sale, and to engage the services of auctioneers.† The catalogues of the various kinds of goods contributed occupy one hundred and ten printed quarto pages; and as several lots were doubled, the quantity actually sold was considerably larger than was promised; while the "outside transactions," or private purchases, were probably quite half in amount to those at auction. Of the sale itself, and of the policy of semi-annual sales hereafter, we forbear to speak, simply on the ground of decorum. The New England Society is under the control of gentlemen who are entirely competent to decide every question which concerns it; who possess full knowledge of the deprecatory comments of persons and newspapers in other cities, and who are well acquainted with the opinions expressed here, as to the degree of success which attended the endeavor in July, to restore to Boston its former position in vending our manufactures, and we would not intrude with advice or suggestion.

The general business of Boston for the past year promised well until the election brought with it its disturbing causes. The manufacturers were well employed, and the flow of food and raw materials into Boston for distribution to the manufacturing districts gave evidence of a healthy activity, and goods in return flowed freely back for shipment. The annual report of the *Boston Shipping List* remarks:—

Up to the middle of November, all departments of our trade were in a very flourishing condition. The West, enriched with most bountiful crops at a time when short supplies in Europe guaranteed good prices—the South, with cotton crop prospects falling somewhat short of last year, but as all the leading markets were advancing for this staple, with manufacturers fully employed at home and abroad, a better range of prices was likely to make up for the deficiency of the crop—all conveyances by lake and river, canal and railroad, profitably crowded with produce seeking an outlet at the seaboard, giving more employment to the shipping interest and better freights than had been obtained for several years—manufacturers very generally employed and preparing for increased activity in all departments—it was no wonder that the suddenness of the panic in November, together with its novel and uncertain character, put a stop to all kinds of business, and upset for the time being all calculations for the future.

The receipts of the various articles of produce, with some few exceptions, show a fair increase over previous years. The increase of 58,272 bales of cotton, over the very large receipts of last year, is an indication that the cotton mills of New England have been fully employed. The activity of the trade in 1860, in connection with the prosperity of the two previous years, has placed this department of our industry in a very flourishing position. Woolen manufacturers have also enjoyed a very

* Deming Jarves, David Sears, Henry A. Whitney, J. Wiley Edmonds, James M. Beebe, Amos A. Lawrence, Benjamin E. Bates, Tyler Batcheller, Augustus Lowell, Patrick T. Jackson, George C. Richardson, E. M. Mason, Henry A. Rice, and Alexander H. Rice.

† The gentlemen employed were Messrs. Townsend, Mallard & Cowing, N. A. Thompson & Co., Samuel Hatch, and John H. Osgood, all of Boston.

healthy and profitable trade during the year. Fears are entertained, however, that the coming year will be an unfavorable one for the manufacturing business on account of our present political and financial troubles. Manufacturers, in consequence, now move with the greatest caution. Purchases of the raw material are made only as wanted to complete assortments, as it is thought advisable to reduce present stocks rather than add to them, which is usually done at this season. Our cotton mills, with goods sold up comparatively close, and a fair export and home demand for the most desirable fabrics, will continue the production without much abatement for the present, but woollen manufacturers will reduce the production to some extent unless confidence is soon restored to business circles.

Breadstuffs, provisions, and produce generally have met with a very fair demand. Great Britain has purchased largely of these products the past year, and good prices have been realized. With the West and South our trade has been comparatively large, and with the facilities afforded by new steamship lines to the South, the prospect of a largely increased trade was quite promising for the future. With Canada our produce trade is increasing quite rapidly. This trade is yet in its infancy, as only a few years have passed since produce from that section sought our market to any extent, but now large supplies of flour, oats, peas, barley, butter, hogs, and other articles are daily arriving and make up no inconsiderable item of our aggregate receipts. The value of some few article of produce received from the South, the West, and the Canadas in 1860, nearly all of which is consumed in this neighborhood, is estimated as follows:—

Cotton.....	\$20,000,000	Leather.....	10,000,000
Flour.....	7,000,000	Provisions.....	3,000,000
Corn.....	1,500,000	Naval stores.....	700,000
Oats.....	600,000	Butter and cheese.....	3,500,000
Coal.....	3,000,000	Wool.....	6,000,000
Hides.....	2,000,000		

The boot and shoe trade shows a falling off of 92,000 cases compared with 1859, the quantity forwarded from our city by water and railroad comprising 658,000 cases against 750,000 cases last year, a falling off in business equal to \$3,500,000. The prospects of the trade, which were encouraging early in November, have again become uncertain by the occurrences of the past six weeks, and manufacturers do not look for any activity for the present.

Calcutta goods, with the exception of gunny cloth, have moved off quietly during the year, but at prices on the whole which were not satisfactory. The imports of the year show a falling off in nearly all the leading items, such as linseed, saltpeter, gunny bags, and cloth, compared with last year. The markets of the country, however, have been amply supplied with Calcutta goods, and the amount taken for consumption, based upon the movements of previous years, have fallen short of expectation.

The shipping interest has been more fully employed and better paid than for several years. The large amount of breadstuffs going forward to Europe has given employment to all available tonnage, while vessels engaged in the East India trade, and other branches of our commerce, have obtained very remunerative rates, forming quite a favorable con-

trast with the general dullness which prevailed throughout the year 1859. The arrivals and clearances have been as follows:—

	Arrived.					Cleared.				
	Ships.	Barks.	Brigs.	Schooners.	Total.	Ships.	Barks.	Brigs.	Schooners.	Total.
1860..	187	359	866	1,879	3,291	122	259	860	1,907	3,288
1859..	248	381	611	1,649	3,089	177	380	757	1,572	2,886
1858..	171	824	764	1,488	2,747	189	302	722	1,508	3,066
1857..	246	394	759	1,509	2,905	214	359	671	1,569	2,813
1856..	241	351	723	1,377	2,692	210	357	755	1,618	2,940
1855..	227	326	849	1,682	3,084	193	398	948	1,759	3,298
1854..	246	395	888	1,567	3,091	233	394	873	1,671	3,171
1853..	203	333	882	1,566	2,984	160	372	912	1,629	3,073
1852..	236	332	840	1,466	2,864	188	350	839	1,486	2,863
1851..	191	288	817	1,542	2,588	133	349	806	1,560	2,848

Besides the above 47 steamers have arrived during the year, and 48 have cleared.

The business in some of the leading articles have been as follows:—

COTTON.—All good cotton arriving during the first ten months of the year found a ready sale at comparatively high prices, but with more abundant supplies of inferior descriptions, low grades were less sought after. Our market in October was more active and buoyant than any previous month of the year, the injury to the crop inducing manufacturers to purchase quite freely on the spot and to arrive. The political and financial troubles the past six weeks nearly put a stop to business, and prices have been irregular and unsettled, although near the close of the year a much better feeling prevails. Purchases to some extent early in December were made at 1 a 2 cents per pound decline, but the market has since recovered and present current rates are within $\frac{1}{4}$ a $\frac{1}{2}$ cents per pound of the highest point of the year. The arrivals of the year show an increase of 58,272 bales over last year, and are the largest ever received. The bulk of this increase has been received during the past four months, and was contracted for at comparatively high prices in the leading Southern markets. Buyers who looked to our market for supplies have been able to purchase on much easier terms. The activity among our manufacturers has continued through the year without abatement, and the consumption of the article has steadily increased. The prospects of the coming year open quite unfavorably, to say the least. The highest and lowest prices for five years have been as follows:—

MIDDLING FAIR NEW ORLEANS.

1860.....	12 $\frac{1}{4}$ a 14	1857.....	12 a 13 $\frac{1}{2}$
1859.....	12 $\frac{1}{4}$ a 14	1856.....	11 a 14 $\frac{1}{2}$
1858.....	11 a 14 $\frac{1}{2}$		

The receipts have been as follows:—

1860.....bales	381,966	1857.....bales	211,604
1859.....	323,694	1856.....	235,554
1858.....	279,523		

DOMESTICS.—The demand for cotton goods has continued without much abatement nearly the entire year, and the production of all our leading mills has found a ready sale at good and remunerating prices. The market opened with an active demand in January last for consumption and export, and large contracts were made early in the year for drills, heavy sheetings, and other desirable goods, the engagements of

drills extending in some instances throughout the year. Brown drills opened at $8\frac{1}{2}$ a 9 cents, and the entire production of the year has been sold mostly at these figures, although at the close $8\frac{1}{2}$ cents is the current rate. All other leading styles of cotton goods have sustained very good and uniform prices during the year. The comparative exports from Boston and New York the past five years have been as follows:—

	Boston.	New York.	Total.
1860.....packages	85,804	86,059	121,863
1859.....	83,362	74,549	107,911
1858.....	81,421	59,994	91,415
1857.....	80,959	26,653	57,612
1856.....	89,740	84,782	74,522

The prospects of the trade the coming year are not so encouraging as last year. Our exports to the East Indies have been materially checked for some months past, and drills begin to accumulate in the hands of manufacturers. The Western trade promises fair, but to what extent the political and financial excitement will interfere with operations with the South and West remains to be seen. The trade for a month or two past have been disposed to purchase lightly, but as there is only a small stock of desirable goods in the hands of manufacturers, no material change in prices is looked for at present. To California the shipments have amounted to 4,367 packages against 6,800 packages in 1859, 6,922 packages in 1858, 2,947 packages in 1857, 5,161 packages in 1856, 9,992 packages in 1855, 1,601 packages in 1854, and 6,524 packages in 1853. The highest and lowest prices for heavy sheetings and drills for five years have been as follows:—

	Sheetings.	Drills.	Exports.	Value.
1860.....	$8\frac{1}{2}$ a $8\frac{1}{2}$	$8\frac{1}{2}$ a 9	85,804	\$2,181,926 94
1859.....	$8\frac{1}{2}$ a 9	$8\frac{1}{2}$ a 9	83,362	1,974,408 34
1858.....	$7\frac{1}{2}$ a $8\frac{1}{2}$	$8\frac{1}{2}$ a $8\frac{1}{2}$	81,421	1,769,701 21
1857.....	$8\frac{1}{2}$ a $9\frac{1}{2}$	$8\frac{1}{2}$ a $9\frac{1}{2}$	80,959	1,907,155 22
1856.....	$7\frac{1}{2}$ a $8\frac{1}{2}$	$7\frac{1}{2}$ a $8\frac{1}{2}$	89,740	2,219,668 89

DREWOODS.—The highest and lowest prices for some years have been as follows:—

	St Domingo logwood.	Sassafras wood.	Lima wood.
1860.....	\$13 00 a \$17 00	\$40 a \$45	\$52½ a \$75
1859.....	12 50 a 15 50	40 a 52½	65 a 87½
1858.....	10 75 a 15 00	47½ a 75	90 a 125
1857.....	10 00 a 22 00	65 a 100	85 a 95
1856.....	16 00 a 22 50	50 a 65	70 a 90

FISH.—Prices of mackerel have been quite irregular the past year, owing to the variety of qualities embraced in the catch. For six weeks past prices have been quite unsettled, and fare sales for cash have been made at very low figures. Early in the season the prospects of the catch were very unfavorable, all vessels from the bay returning with unusually small fares, but during October and November shore mackerel were caught quite freely, and the bay fleet toward the end of the season were more fortunate. The returns of the Inspector are likely, in consequence, to add up much larger than last year, of which no inconsiderable part are medium 2's. The highest and lowest prices for some years past have been as follows:—

	No. 1.	No. 2.	No. 3.
1860.....	\$18 00 a \$18 50	\$6 50 a 14 00	\$5 00 a \$10 50
1859.....	14 00 a 17 00	11 50 a 15 50	8 00 a 11 00
1858.....	9 00 a 16 00	8 00 a 14 00	5 00 a 11 00
1857.....	8 00 a 14 00	7 00 a 13 00	6 50 a 9 00

Medium and large codfish have been comparatively uniform in price during the year.

	Large.	Small.
1860.....	\$3 00 a \$4 25	\$1 25 a \$2 50
1859.....	3 00 a 4 50	2 00 a 3 25

The exports of fish have been as follows:—

	1860.	1859.	1858.
Codfish .....drums	9,576	8,489	9,235
Codfish .....boxes	7,720	6,620	8,579
Codfish .....qtls.	38,886	38,702	56,218
Mackerel.....bbls.	46,167	56,041	77,193
Herring .....boxes	125,277	92,074	85,381

FLOUR.—The flour market maintained a very uniform tone until the middle of November, and prices were less fluctuating than in any previous year for ten years, the variations of the different brands, except a few of the very choice grades of superior, not exceeding 25 a 50 cents per barrel. The first six months of the year the export demand anticipated was not realized, and, with a large stock of old wheat and flour on hand, and the prospect of a larger crop than for many years, nothing could have prevented prices from touching a very low point except the failure of the crops in Europe, which at that time became quite apparent. From September to early in November the movements in breadstuffs were more extensive than at any previous period in the history of the trade. Every conveyance has been called into requisition to convey the surplus products of the West to the seaboard, and this surplus has been freely taken for the English market, the shipments to that destination largely exceeding any previous year. Notwithstanding this extensive export demand, prices rapidly declined the last of November and early in December, ranging some two weeks ago from \$4 25 a \$4 50 for the common. For four weeks in November and early in December the article was almost unsaleable, which, at a time when our harvest receipts were coming forward, greatly depressed the trade. This state of things was brought about by the unsettled state of political affairs, the unexpected and stringent money market, and the difficulty of negotiating exchange. Within the past two weeks the advance has been as rapid as the decline a few weeks previous, and the current prices at the close of the year are \$5 25 for common. The injury to the choice winter wheat in the vicinity of St. Louis has materially reduced the quantity of choice flour received from that section, but the choice family brands of Baltimore have in part made up this deficiency. From Canada very choice flour has been received, but not to such an extent as last year, but from Ohio and Michigan the flour received gives more than the usual satisfaction. The highest and lowest prices of Western fancy, extra, and superior flour, including choice St. Louis, for five years past, have been as follows:—

	Fancy.	Extra & superior.	Southern.	Extra & superior.
1860.....	\$4 50 a \$5 87	\$4 75 a \$9 00	\$5 50 a \$6 25	\$6 00 a \$8 75
1859.....	4 50 a 7 50	5 00 a 10 50	5 50 a 8 00	6 50 a 9 50
1858.....	4 25 a 5 75	4 50 a 8 25	4 75 a 5 75	5 50 a 7 00
1857.....	4 50 a 7 50	5 00 a 10 50	5 50 a 8 00	6 00 a 9 50
1856.....	6 00 a 9 25	6 75 a 11 00	6 50 a 9 50	7 50 a 11 00

The stock on hand is estimated at 275,000 bbls. against 250,000 bbls. in 1858, 225,000 bbls. in 1857, 150,000 bbls. in 1856, 150,000 bbls. in 1855, and 75,000 bbls. in 1854. The arrivals have been as follows:—

By Western Railroad ... bbls.	802,462	From Philadelphia	105,515
Northern	60,587	Baltimore	153,481
Fitchburg	35,787	Portland	217,897
Boston and Maine	14,808	Delaware	8,723
Providence	85,492	Norfolk and ports in Va...	1,973
Fall River	1,173	Other ports	26,557
From New York	25,381		
Albany	260	Total 1860	1,164,782
New Orleans	11,212	1859	1,049,186
Fredericksburg	7,852	1858	1,227,639
Georgetown	10,592	1857	1,049,023
Alexandria	12,054	1856	1,009,450
Richmond	77,876		

GRAIN.—Prices of corn ruled highest in January last, when sales were made at 90 a 2c. for Southern yellow and 85 a 90c. for white and mixed. From these price there was a gradual decline, the market touching the lowest point in December, when sales of yellow were made at 67 a 68c., and western mixed, 65 a 66c. per bushel. The present current rates are 76c. for old yellow and 75c. for western mixed, with which quality our market has been liberally supplied. Our receipts show an increase of 276,709 bushels compared with last year. The highest and lowest prices for five years have been as follows:—

1860	bush.	65 a \$ 92	1857	bush.	65 a \$1 05
1859		81 a 1 15	1856		55 a 1 05
1858		60 a 1 10			

The receipts of corn have been as follows:—

From		From	
New Orleans	bush.	New York State	bush.
Virginia	52,850	Other places	862,417
Maryland	214,616		886,402
Pennsylvania	296,886		
Delaware	186,235	Total, 1860	2,098,250
	79,844		

The receipts of corn, oats, rye, and shorts for five years have been as follows:—

	Corn.	Oats.	Rye.	Shorts.
1860	bush.	2,098,250	1,467,611	33,156
1859		1,821,541	1,188,495	24,920
1858		2,447,814	989,691	45,604
1857		2,178,755	752,859	39,154
1856		2,608,553	866,280	40,258
				551,795
				448,492
				464,274
				382,322
				314,292

WOOL.—In January last the market opened dull for domestic wool, and from January to June the tone of the market was rather downward, prices during that time having declined from 5 a 6c. per lb., ruling in June from 30 a 60c. for fleece, and 30 a 52c. for pulled. The movements of manufacturers and speculators in the wool-growing districts the last of June, and the eagerness with which the new clip was purchased by them at an advance of 2 a 3c. per lb., in many instances, on the previous year's prices, caused a much better feeling, and improved prices were realized until the sudden stringency of the money market in November put a stop to all business. The demand for some months past has been almost exclusively confined to the medium grades of fleece, and there is in consequence a

very good supply of fine wool on hand, while early in the year low and medium grades were neglected. The demand for woollen goods has been quite equal to expectation, the production of all our leading mills having been sold readily at satisfactory prices, but the prospect ahead is not considered very encouraging on account of the embarrassed state of all branches of trade. Manufacturers have, in consequence, reduced the production to some extent, and the business is likely to be quite small for the present. The prices previous to the panic ruled from 39 a 67c. for fleece, and 35 a 55 for No. 1 to extra pulled, but the few transactions since have been principally at 5 a 6c. per lb., decline from these figures. The stock is estimated at 2,000,000 lbs., against 2,500,000 lbs. in 1859. The receipts have been as follows:—

	Domestic.	Foreign.	
	Bales.	Bales.	Quintals.
1860.....	48,974	30,180	16,471
1859.....	45,858	36,708	88,774
1858.....	32,306	19,882	10,322
1857.....	28,783	37,680	18,847
1856.....	33,711	14,478	17,755

EXCHANGE.—Bankers' 60 day bills on London ruled from 8½ a 10 per cent premium, from January to early in November; but for the past six weeks the rates have been almost entirely nominal, ruling from par to 5 per cent premium, with sales principally at 2 a 5 per cent during that time.

SPECIE.—The export of specie for the last nine years has been as follows:—

1860....	\$1,666,547 00	1857....	\$9,712,759 15	1854....	\$7,413,437 32
1859....	6,049,420 56	1856....	2,227,059 08	1853....	5,763,517 88
1858....	2,708,353 64	1855....	14,869,470 85	1852....	3,495,006 22

BOOTS AND SHOES.—The year just closed must again be put down as one of comparative dullness and inactivity in the boot and shoe trade. Prices during the year have ruled low and unsatisfactory, if we except some favorite styles of work, and the amount of goods sold show a considerable falling off compared with previous years. The spring trade was quite backward, and active operations did not commence before the middle of January. At the commencement buyers had everything their own way; the desire to close up stocks on the part of holders was so great that they were almost allowed to fix their own prices. A strike among the workmen in February, which became quite extended, afforded a partial relief to the market by reducing the production of desirable work, and for the balance of the season comparatively better prices were obtained for the styles of goods most affected by the strike. The fall trade was but a moderate one, and disappointed expectation. Neither the South nor the West purchased to the extent expected, and notwithstanding the production in the interval between the spring and fall business was less than for some previous years, still stocks were ample for all the requirements of trade, with, in fact, an oversupply of ordinary work on the market. The position of the trade at the close of the season was, however, more favorable than some previous years. The stock of all good and desirable work was sold up close, and the market was also relieved sufficiently of other descriptions to insure a healthy trade. Our manufacturers were looking forward for a large increase in the demand

from the West, on account of the general prosperity of that section, which it was believed would more than make up for any falling off from other quarters, but the sudden and unexpected money crisis in November last, extending to all branches of trade and all sections of the country, has changed the aspect of things, and will no doubt seriously interrupt the trade for the present. For a month or two past manufacturers have been curtailing operations, and the production of goods is now much smaller than for any previous year for some time. Both dealers and manufacturers look forward to a very unsatisfactory trade, but have been warned in season to prepared for such a state of things. The shipments to California during the year have been light compared with previous years. We look for some increase in the exports to that market the coming year. The shipments amount to 38,774 cases in 1860, against 50,254 cases in 1859, 64,577 cases in 1858, 32,868 cases in 1857, 42,258 cases in 1856, 64,958 cases in 1855, 37,621 cases in 1854, and 37,916 cases in 1853. The quantity of boots and shoes cleared at the custom-house has been as follows:—

1860	cases	195,191	1857	cases	234,422
1859		233,246	1856		224,323
1858		222,284			

The quantity forwarded by railroad has been 463,000 cases, which would make the aggregate amount of goods forwarded from our city, by water and railroad, 658,000 cases, against 750,000 cases in 1859, a falling off of 92,000 cases compared with last year, equal to \$3,500,000.

LEATHER.—The market for leather has been very dull throughout the year, and prices have ruled quite low, but more uniform than compared with some previous years. Manufacturers have purchased sparingly, and there has been scarcely a week when the market could be called active. The receipts this year, if will be observed, are made up from every possible source, by railroad and water, and comprise 491,304 sides and 216,854 bundles, equal to 3,100,000 sides of leather, the estimated value of which is about \$10,000,000. The highest and lowest prices for ten years have been as follows:—

HEMLOCK, BUENOS AYRES, AND ORINOCO.

	Per lb.	Receipts	
		Sides.	Bundles.
1860	18 a 22½	491,304	216,854
1859	17½ a 27	445,396	140,062
1858	17 a 26½	317,494	147,820
1857	17 a 34	317,648	109,118
1856	21½ a 34	220,016	131,123

GUNNY BAGS.—For the first three months of the year the market was very dull for gunny bags, and prices declined from 10½ a 10¾c. in January to 8½ a 9½c. for light and heavy bags early in April. During April some 5,000 bales were purchased on speculation and for consumption at from 8½ a 11c. and from May to October the article was held firm, with a speculative inquiry, some 19,000 bales having been sold and resold during that time, prices touching 13½ a 14c. for heavy bags the last of September. Since October there has been scarcely enough doing to make a price. The stock in first hands is 4,000 bales against 6,808 bales in 1859, 14,700 bales in 1858, 13,500 in 1857, 13,000 bales in 1856, 1,000 bales in 1855, and 5,000 bales in 1854. The highest and lowest prices for some years have been as follows:—

1860.....	8½ a 14	1857.....	10½ a 14½
1859.....	9 a 12½	1856.....	10 a 17
1858.....	8½ a 11½		

The imports have been as follows:—

	Boston.	Other ports.		Boston.	Other ports.
1860.....bales	8,480	3,073	1857.....bales	13,298	1,696
1859.....	10,988	3,981	1856.....	28,074	1,850
1858.....	14,191	2,070			

GUNNY CLOTH.—Prices of gunny cloth in January last ruled from 12 a 12½c. with sales mostly at 12½c. in January, February, and early in March. From the middle of March to the 1st of July there was an extensive speculative movement, and prices advanced from 12½c. in March to 17c., at which figure some sales were made the last of June. Upwards of 30,000 bales were sold and resold, to arrive and on the spot, during that time. This movement was based on the advance in East India freights and in consequence the increased cost of importation, moderate shipments from Calcutta, in connection with the fact that the consumption of the article had rapidly increased in 1858 and 1859, with the prospect of a further increase in 1860. It is now evident that prices were run up too rapidly and prematurely. High rates of freight did not check the shipments from Calcutta to the extent expected, while the injury to the cotton crop reduced materially the estimated amount required for consumption. Since July prices have been steadily declining, and the rates current for some weeks past, from 8½ a 9c. cash, are the lowest the article has ever touched in this market. These low figures have in part, however, been in consequence of the pressure in the money market, and the unsettled state of affairs at the South, where this article is consumed. The highest and lowest prices for some years have been as follows:—

1860.....	8½ a 17	1858.....	10½ a 16
1859.....	11 a 13	1857.....	9½ a 14½

ART. IV.—VALUATION OF LIFE INSURANCE POLICIES.

NUMBER X.

HAVING now completed in our previous numbers the collection of materials for our average rates of mortality, and combined them all in a single table, which we think more worthy of confidence than any other, because of the large number and long continuance of the observations on which it is based, of the great variety of the sources whence it is derived, of its freedom from the defects, errors, and anomalies incident to local, temporary, and select observations, and of its combining all the best materials that have been accumulated in the last hundred years, giving to each their appropriate influence according to their worth and reliability, we proceed to indicate the use of this table, and the method of valuation which we think most worthy of adoption by our American life companies.

The usual object of this valuation is to determine the earnings of a

life company before making a dividend to the stockholders or the insured. We have insisted in the July number of this Magazine for 1860, that in making these dividends no future expected profits should be anticipated and counted among the present assets; that the gain from the smaller mortality during the early years of the policy should not be distributed as an earned profit, but reserved for subsequent contingencies; that a large share of the loading is not added for expenses, but for the possibility of an adverse fluctuation in the mortality and other future contingencies, and, therefore, that this share of that part of the premium which is paid in advance for future hazards should be reserved; that the true or best table of mortality should be used in the valuations; and that if any of the premiums that have been already contracted for, should be too small for the future risk, the deficiency should be made up out of the present means before any distribution of profits; and that every one of these allowances are necessary, not merely as prudent and wise precautions to give stability and security to the company, but as proper and indispensable elements of the true valuations of the policies, which cannot be neglected in the just discrimination between the rights and claims of the present and future members of the company.

We mean by true valuation not the net, or the mathematical, or the gross, or the loaded, or the prudent, but what is demanded by strict and exact justice, as well as by a wise and provident judgment of the permanent interests of the company.

To confirm and establish these positions, we would suggest that the proper way of considering a valuation, is to inquire how much of the past payments have been made for past hazards, and how much for future. All that has been received for the former and not yet expended or due is earned; all that has been received for the latter belongs to the future stockholders and dividends, and is not available for present distribution.

The usual mode of considering this subject is to estimate the present worth of the future premiums, and of the future liabilities, and the difference of these is taken as the value of the policies. But it is not difficult from this stand-point to form the most erroneous conclusions, deluding the directors and managers of the company, and ruinous to its best interests. The marginal additions on all the future premiums that may or may not be received, may be reckoned among the present assets; the gains from the selection of lives, from lapsed policies, from a high rate of interest, from profitable investments, and from an expected diminution of mortality, may be anticipated, and the directors and stockholders made to believe that they have earned hundreds of thousands of dollars, when they have in fact been losing every year, by appropriating more than their real earnings to dividends, losses, and expenses.

Dr. Farr tells of a company that had expended nearly all of its receipts, and then figured up a profit of \$480,000. Statements have been published in which the earnings were reported at more than five times the whole receipts. Companies that have been receiving nearly twice as large premiums as they would themselves have charged for the risks that have been already incurred, have counted the whole balance on hand as profits, and sometimes even more than this. In this way the public have been deceived, and the company, and perhaps the actuary himself, deluded and ensnared.

Now, if they had considered what part of the past payments had been made for future hazards, it is not probable they would have fallen into any such mistakes. From both points of view correct conclusions may be obtained, but we prefer to look at the past and actual, and not the future and the uncertain.

It follows immediately, from this mode of consideration, that the computer has nothing to do with the premiums that are charged, unless they are too low for the risk that was assumed. His only business is to inquire how much has been received for future hazards, and if more than this is on hand it is earned. With the future gains, whether they are possible, probable, or certain, he has nothing to do.

Now, in order to learn what has been paid for the future, we have only to consider how much more ought to be charged to the policy-holder at his present age, than when his policy was first issued. This difference, multiplied by the value of an annuity at the present age of the insured, gives the usual formula, $(p - P)(1 + A)$, where p and P represent the proper premiums at the age of entrance and the present age, and A the value of an annuity of one dollar at the present age of the insured. These premiums are not gross, because the expenses on them have been already incurred. They are not net, or just sufficient to cover the average or probable mortality, because every company charges not only for the real risk and expenses, but also a margin for the possibility of an increase in the mortality over the average, and for other future contingencies. While ten, fifteen, or twenty per cent at farthest, on the net premium, will cover expenses, it is common to add a loading of thirty or forty per cent. The usual American premiums at thirty, thirty-five, and forty, are 2.36, 2.75, and 3.20, while by the Carlisle table they are 1.76, 2.02, and 2.37; by Farr's they are 1.84, 2.14, and 2.52; and by our average table they are 1.82, 2.12, and 2.50; showing an excess of more than twenty-five per cent over the largest premiums, about thirty per cent over ours, and thirty-five per cent above the Carlisle. Now, the average expenses of the sixteen American companies doing business in Massachusetts are only ten per cent, which is less than half of the loading. Almost all of the other contingencies, except the fluctuations in the mortality, are provided for in the low rate of interest. So that about half of the loading is charged for the possible excess of mortality. It follows, therefore, that ten or fifteen per cent is usually added to the premiums for this future contingency, and ought therefore be reserved; and, therefore, that p and P should be ten or fifteen per cent in advance of the net premiums. As it was right and proper to charge this at first, it is just and prudent that it should be appropriated to the purpose for which it was paid.

It is also evident from the mode of consideration we have suggested, that the true table of mortality should be used, and that any saving by a low mortality in the early years of the policy belongs to the future, since the past hazard is the actual and not the average.

And here we will introduce the opinion of Mr. Farren to confirm the correction we suggested in the July number for this deterioration of life. We concluded from Mr. Higham's discussion of the London observations, that the principal effect of selection was in the first year. Mr. Farren, "after eliminating the influence of selection over the first year, concludes," from the same observations, "that the rates of mortality of persons in-

sured," "would not particularly differ from those prevailing among the male population at large, taken indiscriminately, without regard to health."

The correction we suggested for this first year's deterioration, was to reduce P a fourth or a third of its value. The mortality given by Mr. Higham for the first year of insurance, compared with the corresponding rate in the actuaries' table, is as follows:—

	Ages,	25.	30.	35.	40.	45.
First year.....		.00414	482	574	620	848
Actuaries' table .....		.00777	842	929	1086	1221
Differences.....		.00363	360	355	416	373
Divided by $A + 1$.....		.00019	20	21	26	25

The average of these is .00022, and as they differ but little, and the correction is only approximate, it will be better to use this average for the reduction of P than the one suggested before, especially as the numbers given by Mr. Farren differ considerably from those of Mr. Higham.

If any of the premiums charged by any particular company are so low that, when reduced by the usual percentage of the company's expenses, they become less than P , these reduced premiums must be substituted for P in this formula; because, if any losing contracts have been made, sufficient must be reserved out of the present means to make up any deficiency from this source.

We shall now illustrate the modes of computation that have been adopted by different actuaries, and then compare some of these with the actual experience of the London life offices. The valuable contributions of Mr. James, to the recent Convention of Life Insurance Officers at New York, will enable us to present the most conclusive and satisfactory evidence of the propriety of the method of valuation we have recommended.

Most of the plans that have been adopted may be embraced in the following formula:—

$$\frac{H}{m+x} = \left(1 + \frac{A}{m+x} \right) \left(\frac{ap}{m+x} - \frac{bP}{m} + c \right)$$

1. Let a and b be unity, c zero, p and P the net Northampton three per cent premiums, A the Northampton value of an annuity, m the age when insured, and $m+x$ the present age, and we have the method employed by Mr. William Morgan, Actuary for the Equitable. As the Northampton table is very defective, this plan values neither the liabilities nor the premiums correctly; and the only thing to recommend it, is that the tabular mortality being too high, the net reservation is enough to meet the adverse fluctuations to which a company is exposed. This formula is now seldom used.

2. Let a , b , and c , be the same as before, P the actual charged premiums, and p the true premium, or that derived from what is esteemed the best table, and A the true annuity. This is the plan adopted by Neison and Woolhouse. It anticipates all the future profits, and counts them already earned, reserves nothing for expenses or future contingencies, and is suited only to delude the directors and the public, and lead the company to ruin and bankruptcy.

3. Let a , b , and c , be as before, and p and P the actual premiums. This is the formula used by Bowditch for the Massachusetts Hospital, and

errs on the safe side. It reserves all the loading on the payments that have been made for future risks, and as part of this has been already paid out for expenses, the reserve is larger than is necessary. As, however, it allows nothing for the deterioration of life, its reservation is but little in excess.

4. Let a , b , and c , be the same as before, and p and P the true net premiums, and A the true annuity. This is the method used by the Massachusetts Commissioners, who have adopted the Actuaries' as the true table. It gives the reserve too small, because it counts all the loading on the past payments for future risks as already earned, and makes no allowance for the depreciation of life, except what is due to the increased age of the insured. Besides this, the table used as the true one not only "understates the value of the sums insured," according to the high authority of Dr. Farr, but also "overstates the value of the premiums, and consequently underrates," by both these errors, the proper reserve. And if this could be said in England, it is still more likely to be true in the United States.

Some may suppose that the use of four per cent interest in the calculations may be a sufficient offset to these defects. But it must be remembered that four per cent is the net interest at which all the receipts are supposed to be continually compounded without any loss of time, after deducting the expenses of investing and managing the funds, the salaries and fees of officers and solicitors employed in making the investments, the losses and depreciation of stocks, the non-payment of loans, the loss of interest when money is detained by agents, transmitted from distant places, transferred from one investment to another, or lying idle in bank, as well as the possible reduction of interest in the long future period during which the policy may be in existence. Premiums are not always promptly paid, and when received they cannot be immediately loaned on satisfactory security. Losses are often settled before the insurance year has expired. All these and other things bring down the rate of interest much below the nominal. Dr. Farr thinks three per cent the proper rate in England, and the New York Life Convention decided in favor of four for this country. And they are to be commended, we think, for this decision. Higher net rates involve hazard in the investment, and this, in the long run, tends to bring down the rate to that on the best securities, which is lower than five, even in this country.

The high authority of an official valuation ought, by all means, be on the safe side. Some of our American companies need to be warned of the dangers they incur from their large dividends, or insufficient premiums, or extra hazardous risks, and we would counsel the commissioners to allow for every contingency. Very high authority in Boston has given them the same counsel we have here suggested, and we shall hope to see them use a better table, and increase their valuation so as to provide for the two contingencies we have mentioned above.

5. Let b and c be the same as before, but a .71, or .72, or .75, p the actual premium, and P the true, and A the true annuity. This plan is used by one of our American companies—the Carlisle being taken for the true table. The object of using a fraction for b is to reduce the charged to the net premium, and this purpose determines its magnitude. This plan is, therefore, nearly the same as the preceding, except that the Carlisle table is adopted, which has a less mortality than the Actuaries',

and is more irregular and defective. We think this formula gives the reserve too small, because of the low mortality of the table, the omission of all the loading on the past payments, and of any allowance for the deterioration of life.

6. Let a and c be as at first, and b only .80, and p , P , and A the true values. This is recommended by Dr. Farr.—(Reg. Gen. Rep., vol 12, page lxiii.) It gives an ample reserve, and might suit for an old office like the Equitable, but it is not at all adapted to most companies. For the first few years the reservation would exceed the whole receipts.

7. Let c , p , P , and A be the same as in the last method, but a and b equal and more than unity, say 1.10 or 1.15. This formula is used by some of our best American companies, and is admirable. It adds a percentage to the reserve, thus retaining out of the payments that have been made for future risks, the loading that was added for future contingencies; not the whole loading on this payment, but the remainder that is left after paying expenses. As ten or fifteen per cent has been paid by the insured for their future security, it is wrong to divide this among the present members, some of whose policies will soon terminate by death or purchase, or among the present stockholders, who have yet no claim to the money not earned. As every company ought to require for the hazards it assumes at least ten or fifteen per cent beyond expenses, to provide for the contingency of a higher mortality than the tabular rate, it ought to keep its future risks secured in like manner. This formula does no more, then, than retain for the future members what they have paid for the future hazard, and for the future security what ought to be retained. We think 1.10 is the least value that should be given to a and b , and prefer 1.15; some will think the use of 1.20 more prudent.

8. Let all be the same as in the preceding case, and c be .00022, and the formula will then embrace the depreciation of life for the first year after the issue of the policies, according to the experience of the seventeen London offices on 62,537 insurances. This makes the formula all that can be desired, especially if our average table be used for A , p , and P .

9. Another method of making an allowance for the possible increase of mortality above the tabular amount, is to construct a table with a rate of mortality ten, twenty, or twenty-five per cent above the average or true, and to calculate the reservation by such a table. As the mortality is as likely to be excessive in one future year as another, and as any general cause, like climate, epidemics, or new diseases, will probably fall on each age of life, not indiscriminately, but in proportion to the weakness of the vital energies, that is, in proportion to the ordinary mortality at any age, the proper mode of anticipating this liability is to add a percentage to the true or average rate of mortality at every period of life, and to compute the liability from such a table. This has the advantage over the preceding mode in this, that it provides for the contingencies that are anticipated in the exact ratio of that liability on each policy. Instead of a vague, general allowance for this contingency on all the contracts of the office, it estimates the precise liability in each separate engagement of the company, and provides what is needed to meet it. The interpretation of the valuation by such a table would be that it shows how much of the present means are needed to meet the future risks already paid for by the insured, provided the future mortality

should be ten, twenty, or twenty-five per cent higher than is given by the tables.

As we think such a mode of valuation is better than adding a percentage to the reserve, we have constructed the tables at the end of this article by increasing the average rate of mortality twenty-five per cent. The usual columns, D, N, M, and A, as well as the premiums for each age, counting the rate of interest four per cent, will be found under their appropriate heads. These have been all calculated in duplicate, and the results tested by obtaining the premiums from D and N, and also from N and M, and the agreement of these, even to the eighth decimal place, is a proof of the arithmetical correctness of all the numbers in every column. The proofs have been carefully read, and it is believed all the figures are correctly printed. Some may think that twenty-five per cent is too large an addition for this contingency, but as it does not give a larger reserve than the ten per cent added in the seventh and eighth methods of valuations, this objection cannot be sustained.

10. If to this be now added the saving in the first year of life, by making c equal .00024, which is the average correction by Higham's observations, when divided by the $1 + A$ of this table, we shall finally have what we regard as the most satisfactory mode of valuation.

11. If five per cent should be added to the result of this method, by making a and b 1.05, for the purpose of meeting any other future contingency besides the exposure to adverse fluctuations of mortality, we shall have a final valuation; covering every liability and securing safety and stability and permanence beyond fear, doubt, or suspicion.

We will now give two examples of these different modes of valuation, so as to compare the result with one another, and note the differences between them. Suppose two policies for \$10,000 each, to be taken at the ages of thirty and forty, the premiums being \$236 and \$320, and let it be required to value the policies after ten premiums have been paid and just before the eleventh is due. The several values will be as follows:—

1	W. Morgan: Northampton three per cent; using the actual premiums for P , because they are smaller than P	\$1,644 86 and \$1,786 98
2	Woolhouse & Neison: Carlisle four per cent.....	24 27 227 72
3	Bowditch: Using 4.60 for fifty and Carlisle for A ..	1,350 22 1,941 66
4	Wright & Sargeant; Actuaries four per cent.....	1,079 27 1,629 92
4A	James: Actual experience of the 17 London offices.	1,176 80 1,652 12
5	American: Using the Carlisle table and .71 for a ..	830 22 1,235 46
6	Dr. Farr: Farr's No. 2, 4 per cent, using his 20 per cent.	1,647 36 2,202 94
7	American: Farr's No. 2, using 1.10 for a and b	1,177 06 1,686 23
7A	American: Using our av. table, and 1.10 for a and b	1,172 45 1,724 78
8	American: Same as the last, but counting deterioration of life.....	1,207 13 1,751 84
8A	The same as the last, but counting a and b at 1.15.	1,260 43 1,830 24
9	The average table, with 25 per cent inc. of mortality	1,142 97 1,677 11
10	Same as the last, but counting depreciation of life..	1,178 55 1,706 77
11	Same as the last, but counting a and b 1.05.....	1,235 70 1,790 62

Of these, 1 is too large, especially at the younger ages; 2 does not compare at all with the rest; 3 and 6 are too large at all ages; 4 and 5 are too small, especially for recent policies; of the rest, we regard 8 and 10 as giving the least that is consistent with justice, propriety, and safety; 8 A and 11 are more prudent and preferable, especially for the United States.

We will now compare some of these methods with the actual experience of the seventeen London offices, and thus submit them to the test of actual trial on by far the largest experience that has ever been collected. The contributions of Mr. James enables us to say how much ought to be reserved on a policy issued at the age of thirty that had been running any number of years, by comparing it with thousands of other policies issued by those London companies at the same age. So also for other ages than thirty, the insurances made at any age being all kept by themselves and traced through their whole duration, without being mixed up with other policies issued at different ages.

This is obviously the true test of any plan of valuation. Every policy to be valued is compared with others issued under exactly the same circumstances, and the computed value compared with the real. Below is a table of values at thirty-five, and also the average for twelve policies, all for \$10,000, at six ages: one at 25, two at 30, three at 35, three at 40, two at 45, and one at 50, which numbers will nearly represent the admissions of our American offices.

The first column contains the valuation according to the actual experience of the seventeen London offices; the second, the Massachusetts valuation, according to the general experience of those offices when the young and old policies are all combined; the third and fourth, the valuations given by our eighth and tenth methods, which we have stated to be the very lowest that ought to be adopted. *A*, *p*, and *P* being taken from our average tables, and 1.10 being used for *a* and *b* as in the eighth method above explained.

	—Policies issued at 35.—				—Average of six ages.—			
	James.	Wright.	Eighth.	Tenth.	James.	Wright.	Eighth.	Tenth.
First year	\$159	\$114	\$161	\$160	\$177	\$134	\$179	\$177
Two years	283	234	289	285	321	273	327	322
Three years	407	356	420	413	464	415	478	470
Four years	536	482	555	544	612	561	635	621
Five years	672	613	693	679	764	710	791	778
Average of five years.	401	358	424	416	468	419	482	474
Ten years	1,391	1,334	1,446	1,412	1,563	1,506	1,643	1,605
Twenty years	3,064	3,013	3,255	3,155	3,330	3,288	3,478	3,439

This comparison shows that the Massachusetts method, although founded on the general experience of the London offices, gives a less valuation for all ages than the real experience of those offices when the insurances are assorted so as to tell the mortality on policies precisely similar to those that are to be valued; the deficiency being as much as twenty-five per cent below the proper result in the first year, and ten per cent below when the average duration of the policies is two or three years; the percentage of deficiency decreasing as the policies become older. It also shows that our eighth and tenth methods give results just sufficient to meet the deaths at the early ages of insurance, leaving nothing for the chance of adverse fluctuations of mortality; while at the older ages, when the policies have had a long continuance, only three or four per cent is allowed for this and other future contingencies. These results satisfy us, and we think they should satisfy every one, that these two plans give the least valuation that ought to be adopted to comply with the demands of justice and safety, and that the eleventh is to be preferred, if prudence and undoubted security are thought to be more important than justice and safety.

	B(1.25)	Living.	Log. D.	Log. N.	Log. M.	Premium.	Annuity.
15..	.00786	7000	7.5895979	8.8665822	7.0244891	.0142849	17.92276
16..	.00826	6945	7.5691376	8.8430026	7.0122604	.0147658	17.78783
17..	.00863	6888	7.5485020	8.8192483	6.9996449	.0151494	17.65290
18..	.00898	6828	7.5277045	8.7953180	6.9867008	.0155376	17.51888
19..	.00930	6767	7.5067538	8.7712095	6.9734687	.0159316	17.38468
20..	.00960	6704	7.4866624	8.7469202	6.9600028	.0163336	17.24988
21..	.00988	6640	7.4644397	8.7224461	6.9463415	.0167454	17.11367
22..	.01015	6574	7.4430942	8.6977827	6.9325217	.0171688	16.97581
23..	.01040	6507	7.4216302	8.6729248	6.9185661	.0176052	16.83589
24..	.01064	6440	7.4000566	8.6478661	6.9045103	.0180569	16.69333
25..	.01086	6371	7.3783776	8.6225995	6.8903755	.0185258	16.54777
26..	.01109	6302	7.3566020	8.5971170	6.8761962	.0190142	16.39863
27..	.01132	6232	7.3347254	8.5714095	6.8619670	.0195235	16.24583
28..	.01155	6161	7.3127478	8.5454673	6.8476955	.0200552	16.08911
29..	.01180	6090	7.2906692	8.5192800	6.8333894	.0206115	15.92820
30..	.01205	6018	7.2684306	8.4928358	6.8190819	.0211932	15.76298
31..	.01231	5946	7.2461823	8.4661232	6.8046317	.0218016	15.59361
32..	.01258	5873	7.2237696	8.4391289	6.7901855	.0224417	15.41948
33..	.01287	5799	7.2012382	8.4118393	6.7756896	.0231127	15.24056
34..	.01318	5724	7.1785793	8.3842392	6.7611305	.0238172	15.05583
35..	.01350	5649	7.1557388	8.3563129	6.7464947	.0245574	14.86825
36..	.01384	5572	7.1328476	8.3280437	6.7317816	.0253360	14.67459
37..	.01420	5495	7.1097616	8.2994135	6.7169791	.0261557	14.47676
38..	.01458	5417	7.0865171	8.2704029	6.7020768	.0270198	14.27164
39..	.01499	5338	7.0631052	8.2409913	6.6870650	.0279302	14.06212
40..	.01542	5258	7.0395124	8.2111558	6.6719246	.0288914	13.84720
41..	.01586	5177	7.01547301	8.1808732	6.6566474	.0299071	13.62659
42..	.01632	5095	6.9917536	8.1501172	6.6412369	.0309827	13.40004
43..	.01681	5012	6.9675741	8.1188596	6.6256865	.0321238	13.16723
44..	.01733	4928	6.9431733	8.0870692	6.6099817	.0333359	12.92807
45..	.01789	4842	6.9185526	8.0547119	6.5941087	.0346256	12.68230
46..	.01851	4756	6.8936794	8.0217509	6.5780461	.0359994	12.42986
47..	.01920	4668	6.8685320	7.9881456	6.5617567	.0374637	12.17084
48..	.01998	4578	6.8430791	7.9538527	6.5451959	.0390250	11.90546
49..	.02086	4487	6.8172807	7.9188254	6.5283051	.0406893	11.63411
50..	.02182	4393	6.7910965	7.8830189	6.4110291	.0424634	11.35713
51..	.02290	4297	6.7644820	7.8463449	6.4933075	.0443550	11.07488
52..	.02410	4199	6.7378877	7.8088211	6.4760751	.0463718	10.78782
53..	.02544	4098	6.7097596	7.7703213	6.4562622	.0485222	10.49640
54..	.02692	3993	6.6815849	7.7307997	6.4367878	.0508146	10.20121
55..	.02856	3886	6.6526500	7.6901866	6.4165743	.0532584	9.90276
56..	.03040	3775	6.6230327	7.6484063	6.3955335	.0558634	9.60166
57..	.03244	3660	6.5925920	7.6053787	6.3735514	.0586371	9.29880
58..	.03471	3541	6.5612365	7.5610190	6.3505191	.0615888	8.99499
59..	.03722	3418	6.5288610	7.5152373	6.3263105	.0647252	8.69117
60..	.03996	3291	6.4953547	7.4679394	6.3007968	.0680546	8.38825
61..	.04293	3160	6.4606107	7.4190261	6.2738609	.0715871	8.08639
62..	.04612	3024	6.4245211	7.3683924	6.2453887	.0753349	7.78762
63..	.04952	2885	6.3869814	7.3159259	6.2152765	.0793141	7.49062
64..	.05314	2742	6.3478911	7.2615050	6.1834300	.0835459	7.19623
65..	.05699	2596	6.3071435	7.2049957	6.1497505	.0880552	6.90410
66..	.06111	2448	6.2646265	7.1462504	6.1141860	.0928722	6.61419
67..	.06554	2298	6.2202079	7.0851033	6.0764608	.0980297	6.32648
68..	.07039	2148	6.1737352	7.0218701	6.0365773	.1035636	6.04101
69..	.07571	1997	6.1250027	6.9548447	5.9942712	.1095032	5.75337
70..	.08155	1845	6.0737776	6.8853023	5.9493009	.1158774	5.47925
71..	.08798	1695	6.0197998	6.8124985	5.9013956	.1227149	5.20438
72..	.09501	1546	5.9627709	6.7361693	5.8502434	.1300392	4.93469
73..	.1026	1399	5.9028813	6.6560313	5.7955269	.1378782	4.67087
74..	.1109	1255	5.8383341	6.5717795	5.7369521	.1462759	4.41309
75..	.1200	1116	5.7702514	6.4830770	5.6741324	.1552585	4.16209
76..	.1298	982	5.6977007	6.3895629	5.6066219	.1648397	3.91888
77..	.1405	855	5.6202865	6.2908577	5.5310290	.1750537	3.68351

	R(1.35.)	Living.	Log. D.	Log. N.	Log. M.	Premium.	Annuity.
78..	.1520	785	5.5874990	6.1866479	5.4558306	.1859014	3.45707
79..	.1644	623	5.4488616	6.0762065	5.3715513	.1973989	3.23980
80..	.1776	521	5.3538267	5.9593792	5.2806381	.2095361	3.03230
81..	.1917	428	5.2518764	5.8355921	5.1825784	.2223245	2.83455
82..	.2066	346	5.1424157	5.7043707	5.0767750	.2367243	2.64716
83..	.2221	275	5.0248745	5.5651963	4.9626634	.2497281	2.46994
84..	.2382	214	4.8987650	5.4175605	4.8897766	.2643724	2.30214
85..	.2550	163	4.7635727	5.2608969	4.7076214	.2797206	2.14285
86..	.2724	121	4.6186956	5.0945651	4.5656131	.2958340	1.99137
87..	.2904	88.2	4.4635550	4.9178467	4.4132007	.3128629	1.84637
88..	.3093	62.6	4.2975852	4.7298742	4.2498048	.3310782	1.70607
89..	.3296	43.2	4.1197914	4.5295321	4.0746114	.3508160	1.56886
90..	.3517	29.0	3.9290921	4.3153760	3.8864084	.3724195	1.43379
91..	.3759	18.8	3.7238347	4.0885789	3.6836082	.3938048	1.30009
92..	.4027	11.7	3.5020556	3.8878071	3.4642707	.4231200	1.16661
93..	.4385	7.00	3.2612147	3.5689271	3.2258911	.4539040	1.03101
94..	.4699	3.97	2.9978813	3.2744781	2.9645554	.4898760	0.89277
95..	.5140	2.10	2.7047068	2.9481185	2.6744171	.5324743	0.75151
96..	.5681	1.02	2.3743087	2.5806408	2.3465798	.5683532	0.60817
97..	.6346	.441	1.9926586	2.1583840	1.9674810	.6443873	0.46445
98..	.7159	.161	1.5383937	1.6596002	1.5157317	.7130116	0.32192
99..	.8144	.046	0.9748316	1.0461470	0.9546870	.8101026	0.17846
100.	1.000	.008	0.2263763	0.2263768	0.2093429	.9615886	0.00000

ERRATA IN THE LAST NUMBER.

For 18.343, annuity at age 18, read 18.346. | For .036760, premium at age 50, read .086726.

JOURNAL OF MERCANTILE LAW.

PROFITS AND PARTNERSHIP.

In the Supreme Judicial Court of Massachusetts. Before Judge METCALF.
 Dana H. Fitch and others vs. Samuel P. Harrington and others.

1. An agreement between one partner and a third person, that the latter shall participate in that partner's share of the profits of the firm, as profits, renders him liable as a partner to the creditors of the firm, although, as regards the other members of the firm, he is not their co-partner.
2. The acts and declaration of a person not a partner are not admissible to charge him as a partner, without showing that they were brought home to the plaintiff's knowledge.

Action on a promissory note signed by the name of WHITTEMORE, HARRINGTON & Co. Trial before METCALF, J., who signed this bill of exceptions:—

"SAMUEL P. HARRINGTON alone made defence; and the only question was, whether he was liable, as a partner, with the other defendants.

"It was in evidence that the firm of WHITTEMORE, HARRINGTON & Co. was formed in July, 1856, and carried on business until the latter part of October, 1857, when they stopped payment; and that the notes in suit were given for articles used in the business of the firm.

"The plaintiffs introduced evidence tending to show that SAMUEL P. HARRINGTON was a member of said firm, as between the partners themselves; that the share in the concern, standing in the name of LEONARD HARRINGTON, (one of the members of the firm,) was owned jointly by LEONARD and SAMUEL P. HARRINGTON; that SAMUEL P. held himself out to the plaintiffs, and also to the public at large, as one of the partners in the firm; and that the plaintiffs gave credit to WHITTEMORE, HARRINGTON & Co., under the belief that he was a partner.

"The defendant, SAMUEL P. HARRINGTON, introduced evidence, tending to show that he was not a partner in the firm; that he had not held himself out as such to the public at large, nor to the plaintiffs; that he had no interest in the share of the concern standing in the name of LEONARD HARRINGTON; and that he was not known nor recognized as a partner by the members of the firm.

"The plaintiffs requested the court to instruct the jury, that although SAMUEL P. HARRINGTON was not known by the members of the firm generally to be a partner, yet if the share in the partnership concern, which share stood in the name of LEONARD HARRINGTON only, was owned jointly by LEONARD and SAMUEL P., and SAMUEL P., as between him and LEONARD, was entitled to the profits, if any, which might be derived from that share, he (SAMUEL P.) was a partner in the firm, as to the plaintiffs, and liable to them in this action; that if he held himself out as a partner in the firm, under such circumstances as to induce the plaintiffs to give credit to the firm under that belief, though he was not in reality a partner, he was still liable to them as such; and that his acts and declarations, if made publicly, though not brought to the knowledge of the plaintiffs, were competent evidence that he so held himself out, and thereby induced the plaintiffs to give credit to the firm, under the belief that he was a partner.

"The court declined to give instructions in the terms requested; but instructed the jury as follows:—That if SAMUEL P. HARRINGTON was a member of the firm, when the notes in suit were given, he was liable in this action, whether the plaintiffs then knew or did not know that he was a partner, or whether they did or did not give credit to the firm on the belief that he was a partner; that if he was not a member of the firm, yet, if by his acts and declarations, which were brought home to the knowledge of the plaintiffs, he led them to believe that he was a member of the firm, and to give credit to the firm in that belief, he was liable to them in this action; that his acts and declarations to persons other than the plaintiffs were evidence for the jury to consider, in determining the question whether he was a member of the firm; but if such acts and declarations did not satisfy the jury that he was a member of the firm, then they were not evidence which would render him liable to the plaintiffs, unless knowledge of them was brought home to the plaintiffs, and induced them to give credit to the firm in the belief that he was a member of the firm; that if the share in the partnership concern, which share stood in the name of LEONARD HARRINGTON only, was owned jointly by him and SAMUEL P. HARRINGTON, then SAMUEL P. was liable in this action; but if there was a sub-partnership between LEONARD and SAMUEL P., by which SAMUEL P. was to share in the profits of the firm, to which profits LEONARD was entitled, this alone would not make SAMUEL P. liable for the debts of the firm.

"The jury returned a verdict for the defendant, and the plaintiffs excepted to the instructions given to the jury."

The opinion of the court was delivered by

METCALF, J.—We are all of opinion that the plaintiffs are entitled to a new trial, for the reason that the instruction respecting a sub partnership between LEONARD HARRINGTON and SAMUEL P. HARRINGTON, given, as it was, without any explanation, may have misled the jury. That part of the instructions was given on the authority of COLLYER on Partnerships, (3d ed.,) section 194, which was cited by the defendants' counsel at so late a stage of the trial, that the court had no opportunity to examine the position there laid down, which is thus:—"Although the *delectus personarum*, which is inherent in the nature of partnership, precludes the introduction of a stranger against the will of any of the copartners, yet no partner is precluded from entering into a sub-partnership with a stranger; *nam socii mei socius, meus socius non est*. In such case, the stranger may share the profits of the particular partner with whom he contracts, and, not being engaged to the general partnership, will of course not be liable for their debts."

The only decided cases which Mr. COLLYER cites, in support of this position, are that of Sir CHARLES RAYMOND, referred to by Lord ELDON, in *Ex parte BARROW*, 2 Rose, 255, and that of *BROWN vs DE TASTET*, Jac. 284. In the case in 2 Rose, Lord ELDON said:—"I take it to have been long since clearly established, that a man may become a partner with A., where A. and B. are partners, and yet not be a member of that partnership which existed between A. and B. In the case of Sir CHARLES RAYMOND, a banker in the city, a Mr. FLETCHER

agreed with Sir CHARLES RAYMOND, that he should be interested so far as to receive a share of his profits of the business, and which share he had a right to draw out from the firm of RAYMOND & Co. But it was held, that he was no partner in that partnership, had no demand against it, had no account in it, and that he must be satisfied with a share of the profits arising and given to Sir CHARLES RAYMOND." In the case in Jacob, it was decided, that where one of several partners had agreed with a third person to give him a moiety of his share in the concern, the Court of Chancery might decree an account between them, without making the other partners parties to the bill. These cases show this only:—That as between the members of the firm, *inter sese*, Mr. FLETCHER, in the first case, and the third person in the other case, were not copartners. They decided nothing as to the liability of either to the creditors of the existing firm.

But Mr. COLLYER also cites 2 Bell Com. 636, where it is said:—"There may be a sub-contract, by which a stranger may be admitted to divide with any of the partners his share of the profits. The other partners are not bound to take notice of this sub-contract; nor is there any responsibility attached to it, by which the stranger, as sharing in the profit of the concern, becomes liable for the debts of the partnership." *ERSKINE'S INSTITUTES*, and the case of *FAIRHOLM vs. MAJORIBANKS*, decided in Scotland in 1725, are cited in support of this position. In looking at 3 Ersk. Inst., (ed. of 1828,) sections 21, 22, we find that nothing is there said concerning the liability of such stranger for the debts of the partnership. Mr. *ERSKINE* says, "if any of the partners shall assume a third person into partnership with him, such assumed person becomes partner, not to the company, but to the assumer." We have not seen the report of *FAIRHOLM vs. MAJORIBANKS*. But Mr. *STARK* cites that case and *ERSKINE'S INSTITUTES*, in support of the following passage in his work on partnership:—"Sub contracts between partners and other persons, by which a beneficial interest in the partnership is granted, do not create new partners. The partner himself remains alone liable to company creditors." He adds a quotation from the Digest, which is silent, however, as to such other persons' liability for the debts of the partnership. *STARK* on Part. 155. It would seem, therefore, that the Scotch writers, Mr. *BELL* and Mr. *STARK*, have stated the doctrine which Mr. *COLLYER* has repeated, only as an inference of their own from the established law, that such a sub-contract as those writers mention, between one member of a firm and a stranger, does not make the stranger, as between him and the firm, their copartner; and hence that the law of Scotland, as to such stranger's liability for the debts of the firm, may not differ from the law of England and of this country. Indeed, it is hardly to be supposed that it was decided in *FAIRHOLM vs. MAJORIBANKS*, that such a stranger was not liable for the debts of the firm in a case in which, by the English law and ours, he would have been liable. For both Mr. *BELL* and Mr. *STARK*, as well as Mr. *COLLYER*, correctly state the English law on this point, without an intimation that the Scotch law is different, except by subsequently inserting the passage which the defendants' counsel cited at the trial of the present case. 2 *BELL* Com. 625, 626, *STARK* on Part. 137 *et seq.* *COLLYER* on Part. book i., c. 1.

Now, what is our law and the law of England on this subject? We understand it to be thus:—An agreement between one copartner and a third person, renders him liable, as a partner, to the creditors of the firm, although as between himself and the members of the firm, he is not their copartner; but if such third person, by his agreement with one member of the firm, is to receive compensation for his labor, services, &c., in proportion to the profits of the business of the firm, without having any specific lien on the profits, to the exclusion of other creditors, he is not liable for the debts of the firm. *Denny vs. Cabot*, 6 Met. 90-94. *Bradley vs. White*, 10 Met. 305. *Holmes vs. Old Colony Railroad*, 5 Gray, 58. *Burckle vs. Echert*, 3 Comst. 132. 3 *Kent* Com. (6th ed.) 33 *et seq.* *Parsons' Merc. Law*, 168, and note.

In order to enable the jury to decide whether *SAMUEL P. HARRINGTON* was liable for the debts of the firm of *WHITEMORE, HARRINGTON & Co.* by reason of a sub-partnership between him and *LEONARD HARRINGTON*, they should have received instructions more definite and discriminating than they could derive

from the mere words of Mr. COLLYER. The kind of agreement which would render SAMUEL P. liable for the debts of the firm, and the kind of agreement which would not render him liable therefor, should have been so explained to them that they might intelligently decide whether the agreement between the two (if any was proved) was such as did or did not render SAMUEL P. liable as a partner, for the debts due from the firm to the plaintiffs.

COMMERCIAL CHRONICLE AND REVIEW.

POLITICAL INFLUENCES—SUBSIDENCE OF PANIC—RISKS AND OBLIGATIONS—CIVIL WAR—FAILURES IN THE UNITED STATES—STAGNATION OF ENTERPRISE—DECLINE IN DEMAND FOR CAPITAL—BANK RETURNS—SINKING BUSINESS—LARGE EXPORTS—WHEAT VALUE—NATIONAL BALANCE—LOW RATES OF EXCHANGE—FUTURE ELEMENTS OF SPECULATION—RATES OF MONEY—TREASURY NOTES—GOVERNMENT LOAN—HIGHER RATES—STOCK MARKET—DEPARTMENT FRAUD—INFLUENCE ON PRICES—RATE OF EXCHANGE—SPECIE ARRIVALS—DISPOSITION—ASSAY OFFICE—MINT—WESTERN EXCHANGES.

THE political events which produced the financial panic on the announcement of the Presidential election in November have continued to assume greater importance in the same direction, and to threaten the most serious results for the future. Nevertheless, the "panic" feeling which had been manifest gradually disappeared, and commercial fears subsided in proportion. The first effect of serious difficulties is always to alarm those who have outstanding risks and obligations that may be affected, and there is, as a matter of course, a general and simultaneous effort to cover those risks and use every effort to prepare for the obligations, and these efforts produce an unusual demand for money at any price. This is the more stringent and the more marked when the evils are of an unusual character, and bear on their face, as now, the portentous feature of disunion and civil war, with all its horrors in the background. Annexed hereto we give the statistics of the New York Commercial Agency, which indicates the effect of the panic upon those houses which were caught with outstanding obligations they could not meet in face of the paralysis in collection. The pressure, however created, where the general state of affairs is sound, cannot but be brief, since new enterprises are at once abandoned and propositions for new business at least postponed, and the lapse of a very little time brings with it the maturity and cancelment of contracts and the withdrawal of risks. The sudden stringency at once gives place to ease, and the falling value of money or capital marks the stagnation of those business enterprises which usually demand it. The bank returns, which we publish as usual, illustrate the operation. Under the demand of November the loans rose \$10 000,000, and the price of money was very high. That amount seems, however, to have sufficed to cover immediate wants, and the discounts fell \$6,000,000 to Jan. 1, by means of payment under collections. The low rates of bills and the high rates of money drew specie rapidly from Europe, and some \$10,000,000 arrived thence up to the first week in January, in face of an export of \$6,000,000 in the same period last year, making a difference of \$16,000,000 in the exchanges abroad. At the same time the Western exchanges fell to reasonable rates, permitting of collections, while Southern credit with banking houses were very generally cut off. While no

new notes having been created for new business, the bank line of discounts drops of its own weight, and the rate of money declines still farther. The usual spring business has not been provided for, and manufacturing has been checked. That is to say, the demand for capital in its usual employments has been curtailed to an extent, if we take the magnitude of interests into consideration, seldom before realized. Fortunately, at such a juncture, the state of the foreign markets has been such as to attract unusual quantities of produce, and the exports from the port of New York, as will be found in the trade tables, have, in the last quarter of 1860, been thirty per cent larger than ever before in the history of the country. This embraces farm produce or food to an extraordinary extent. The export of wheat and flour from the United States, since September 1, exceeds by \$25,000,000 the exports of the same articles in 1859, for the same period in which, also, there has been a considerable decline in the amount of goods imported. The demand for cotton abroad has also been active, giving full credits against that article, and there has also been a disposition to invest in stocks at the low prices caused by the panic. The result is, then, following—a balance in favor of the country left by last year's trade, a larger export of domestic produce, including cotton and breadstuffs, and of stocks, on one hand, with a smaller present and prospective import of goods in return. The commercial operation has been, then, to throw the balance largely in favor of the country, or, in other words, to make specie the best article of importation. There has accordingly been considerable receipts, and the extent to which this will be carried must depend upon the import trade, since there is little doubt but that food and cotton will go largely abroad. If importers hesitate about ordering goods the proceeds of the produce sales must come back in coin. The internal exchanges, under the same influences, show the same results, since the large remittance of produce, with restricted purchases of goods, are followed by a marked decline in the rates of exchange on New York at all points of the interior, and collections have been made in a manner to greatly ease the city payments.

The political difficulties once settled, there is but little doubt that a period of commercial enterprise and prosperity would manifest itself far in excess of any previous example. The pendency of such serious calamities as dissolution and civil war make all other considerations give place in their presence. The removal of those fears make the evils of mere commercial revulsion appear light, and such periods of depression are generally followed by the boldest enterprises. The troubles of 1850 were followed by the excitement of 1853, and their recurrence in 1854 preceded the great activity of 1856. The country now, with its railroads built, with its working capital larger and more available than ever, is in a position to develop trade and prosperity in a manner heretofore unexampled. On the other hand, should the difficulties unfortunately not be brought to a close, trade will doubtless, to a limited extent, be continued, food will grow, and industry will be productive; whether it can be permanently protected in its development, surrounded by hostile political exigencies, is matter of serious doubt. The Mexican people, thanks to their genial climate and spontaneous fruits of the earth, can live amidst their anarchy. The North cannot follow that example—a peaceful Union or a bloody transit to a state of despotism seems to

be the alternative. The States of Europe want the breadstuffs of the North and the cotton of the South; both are becoming annually more indispensable to them, and the more so that a general war seems to lower upon the continent.

The discharge of bank loans by payment, while little new paper is making, and the collections in various parts of the country, tend to send capital back to the center, hence the rates gradually fall, and were, to the middle of the month, as follows :—

	On call.		Indorsed.		Single names.	Other good.	Not well known.
	Stocks.	Other.	60 days.	4 a 6 mos.			
Jan. 1st, 1859.	4 a 4½	4 a 5	4 a 5	5 a 6	6 a 7	7 a 8	8 a 10
Feb. 1st.....	5 a 6	6 a 7	5 a 6	6 a 7	7 a 7½	8 a 9	9 a 10
Mar. 1st.....	4 a 5	4½ a 6	4½ a 5½	5½ a 6½	6 a 7	7 a 8	9 a 10
Apr. 1st.....	4 a 5	5 a 6	5 a 5½	6 a 6½	6½ a 7	8 a 9	9 a 10
May 1st.....	5 a 6	6 a 7	6 a 6½	6½ a 6	7 a 9	9 a 10	10 a 12
Jun. 1st.....	6 a 7	7 a 8	6½ a 7	7 a 8	8 a 9	9 a 10	10 a 12
July 1st.....	5 a 6	6 a 7	6½ a 7	7 a 7½	7 a 8	10 a 12	12 a 15
Aug. 1st.....	6 a 7	7 a 8	6½ a 7½	7 a 8	8 a 9	11 a 13	12 a 15
Sept. 1st.....	5½ a 6	7 a 8	6 a 7	7 a 7½	8 a 8½	11 a 14	12 a 16
Oct. 1st.....	5½ a 7	6 a 7	6½ a 7	7 a 8	8 a 9	10 a 12	12 a 18
Nov. 1st.....	5 a 5½	6 a 7	6½ a 7½	7½ a 8	8½ a 9½	12 a 15	12 a 18
Dec. 1st.....	5 a 5½	6 a 7	6 a 7	7 a 8½	8 a 9	9 a 10	12 a 18
Dec. 17th.....	5½ a 6	6 a 7	7 a 7½	7½ a 8½	8 a 9	9 a 10	12 a 18
Jan. 1st, 1860..	6 a 6½	6½ a 7	7 a 7½	7½ a 8½	7½ a 8	9 a 10	12 a 18
Jan. 15th.....	7 a 7½	7 a 7½	8½ a 9	9 a 9½	9 a 10	10 a 11	15 a 20
Feb. 1st.....	6 a 6½	7 a 7½	8½ a 9	9 a 9½	9 a 10	11 a 12	15 a 20
Feb. 15th.....	5 a 6	6 a 7	7 a 7½	7½ a 8	8½ a 9½	10 a 12	15 a 18
Mar. 1st.....	5½ a 6	6 a 7	7 a 7½	7½ a 8	8½ a 9½	10 a 12	15 a 18
Mar. 15th.....	5 a 5½	5½ a 6	6 a 7	7½ a 8	8½ a 9½	10 a 12	15 a 18
Apr 1st.....	5 a 5½	6 a 6½	5½ a 6	6 a 6½	5½ a 7½	9 a 10	11 a 13
Apr. 15th.....	5 a 5½	6 a 6½	5½ a 6	6 a 6½	6½ a 7½	9 a 10	11 a 13
May 1st.....	5 a 5½	6 a 6½	5 a 6	6 a 6½	6½ a 7½	9 a 10	11 a 12
May 15th.....	5 a 6	6 a 6½	5 a 6	6 a 7	6½ a 7½	9 a 10	10 a 12
June 1st.....	4½ a 5	6 a 6½	5 a 6	6 a 7	6½ a 7½	8 a 9	9 a 10
June 15th.....	4½ a 5	5 a 6	4½ a 5	5 a 5½	5 a 6	6 a 7½	8 a 9
July 1st.....	5 a 5½	5½ a 6	.. a 5	5 a 6	5½ a 6	7 a 7½	8 a 9
July 15th.....	5 a 5½	5½ a 6	.. a 5	5 a 6	5½ a 6	7 a 7½	8 a 9
Aug. 1st.....	5 a 6	6 a 7	5 a 6	6 a 6½	6½ a 7	7½ a 8½	9 a 10
Aug. 15th.....	5½ a 6	6 a 7	6 a 6½	6 a 7	6½ a 7½	8 a 9	9 a 10
Sept. 1st.....	6 a 7	7 a 9	6½ a 7	7 a 9	8 a 9	9 a 12	12 a 24
Sept. 15th.....	6 a 7	6½ a 7	7 a 7½	7½ a 8	6½ a 7½	9 a 9½	10 a 10½
Oct. 1st.....	6½ a 7	7 a 8	6½ a 7	6½ a 7½	8 a 8½	9 a 10	12 a 20
Oct. 15th.....	6½ a 7	7 a 8	6½ a 7	6½ a 7½	8 a 8½	9 a 10	12 a 20
Nov. 1st.....	6½ a 7	7 a 8	6½ a 7	7 a 7½	8 a 9	10 a 12	12 a 15
Nov. 15th.....	7 a 8	7 a 9	8 a 9	9 a 10	9 a 12	14 a 15	15 a 24
Dec. 1st.....	7 a 9	9 a 10	10 a 12	12 a 15	15 a 18	24 a 36	.. a ..
Dec. 15th.....	6 a 7	9 a 11	12 a 15	15 a 18	20 a ..	.. a ..	.. a ..
Jan. 1st, 1861.	5½ a 6½	8 a 10	10 a 12	13 a 15	18 a ..	.. a ..	.. a ..
Jan. 15th.....	5 a 6	6 a 7	7 a 8	8 a 9	8 a 10	12 a 16	18 a 24

The decline in rates at call give support to the stock market, and the supply of good business paper is not equal to the demand. The large class tainted with renewals and surrounded with circumstances that weaken full confidence, finds great difficulty in negotiation. The effect of panic upon imports manifests itself in a decline of the government revenues, causing the Treasury Department to offer \$5,000,000 of treasury notes at a moment of excitement, and when rumors of immense defalcations in the War Department were upon the market. The loan was in danger of falling through, when a number of banks and others interested in the payment of the public interest January 1, offered for \$1,500,000

of the notes at twelve per cent interest, on condition that the money should be specially appropriated to the interest. Other bids were made at rates running up to thirty six per cent; ultimately the whole amount was taken at twelve per cent. These subsequently rose to three per cent premium, when the new Secretary, the Hon. JOHN A. DIX, offered the remaining \$5,000,000, with the promise that that amount would suffice the present government. There were \$12,200,000 offered at a range of 8½ a 11 per cent, and the whole, \$5,000,000, was awarded at 10½ average.

The general stock market, the course of which for the past year will be seen in the monthly table in the financial department, improved and remained firm. The facts that leaked out in relation to the abstraction of bonds from the Indian Department indicated that most of the sales of the stocks of Missouri, Tennessee, and other stock, which so heavily depressed the market during the excitement, were of the abstracted bonds, sold to raise money, and were not private sacrifices through fear of disunion. Missouri fell from 76 to 62, and Tennessee from 80 to 64½. Those sales had a powerful influence, that ceased with the pressure to sell. The abundance of money again stiffened the value of stocks.

The rates of exchange that, during the panic, fell to such low rates, rose under returning confidence, but still remained low under the influence of continued large exports of produce. The rates were as follows:—

RATES OF BILLS IN NEW YORK.

	London.	Paris.	Amsterdam.	Frankfort.	Hamburg.	Berlin.
Jan. 1..	9 a 9½	5.18½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	73 a 73½
15..	8½ a 9	5.21½ a 5.18½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
Feb. 1..	8½ a 9	5.18½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
15..	8½ a 9	5.18½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
Mar. 1..	8½ a 9	5.17½ a 5.15	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
15..	8½ a 8½	5.17½ a 5.15½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
Apr. 1..	8½ a 8½	5.18½ a 5.16½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
15..	8½ a 8½	5.16½ a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
May 1..	9½ a 9½	5.13½ a 5.12½	41½ a 41½	41½ a 42	36½ a 36½	73½ a 73½
15..	9½ a 9½	5.13½ a 5.13½	41½ a 41½	41½ a 42	36½ a 37	73½ a 73½
Jun. 1..	9½ a 9½	5.13½ a 5.12½	41½ a 41½	41½ a 42	37 a 37½	73½ a 73½
15..	9½ a 9½	5.13½ a 5.12½	41½ a 41½	41½ a 42	36½ a 37½	73½ a 73½
July 1..	9½ a 9½	5.13½ a 5.13½	41½ a 41½	41½ a 42	36½ a 37	73½ a 73½
15..	9½ a 9½	5.13½ a 5.13½	41½ a 41½	41½ a 41½	36½ a 37	73½ a 73½
Aug. 1..	9½ a 9½	5.13½ a 5.13½	41½ a 41½	41½ a 42	36½ a 37	73½ a 73½
15..	9½ a 10	5.13½ a 5.13½	41½ a 41½	41½ a 42	36½ a 37½	73½ a 73½
Sep. 1..	9½ a 10	5.14½ a 5.13½	41½ a 41½	41½ a 42	36½ a 37	73½ a 73½
15..	9½ a 9½	5.14½ a 5.13½	41½ a 41½	41½ a 42	36½ a 36½	73½ a 73½
Oct. 1..	9½ a 9½	5.15½ a 5.14½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
15..	8½ a 9	5.17½ a 5.15½	41½ a 41½	41½ a 41½	36½ a 36½	73½ a 73½
Nov. 1..	8 a 8½	5.20 a 5.17½	41½ a 41½	41½ a 41½	36½ a 36½	72 a 73
15..	5 a 6½	5.30 a 5.23½	40½ a 40½	40½ a 41½	35½ a 36½	72½ a 72½
Dec. 1..	1 a 5	5.47½ a 5.40	39½ a 40½	40 a 40½	34½ a 35½	69½ a 76½
15..	1 a 4	5.40 a 5.50	39 a 39½	39 a 39½	34½ a 34½	72½ a 73½
Jan. 1..	2½ a 5	5.40 a 5.45	33½ a 39½	39½ a 39½	34½ a 35	68½ a 69½
15..	5½ a 6½	5.30 a 5.33½	40 a 40½	40½ a 40½	35½ a 35½	70½ a 70½

The quotation for sterling on bankers, sixty-day names, ditto sight, 6½ a 7; but good commercial bills sold at 4 a 4½ do., with bills of lading 3½ a 4. These rates were low, but the bills being negotiable, the produce went freely forward, and the arrivals of specie continued considerable from Europe as well as from California, as follows:—

GOLD RECEIVED FROM CALIFORNIA AND EXPORTED FROM NEW YORK WEEKLY, WITH THE AMOUNT OF SPECIE IN SUB-TREASURY, AND THE TOTAL IN THE CITY.

1859.				1860.			
	Received.	Exported.	Received.	Exported.	Specie in sub-treasury.	Total in the city.	
Jan. 7.....		\$1,052,558		\$85,080	\$7,737,965	\$25,600,699	
14.....	\$1,876,300	218,049	1,788,666	88,482	7,729,646	26,470,512	
21.....		567,398		259,400	8,352,485	27,585,970	
28.....	1,210,713	467,694	1,760,582	81,800	8,957,123	29,020,862	
Feb. 4.....		606,969	94,569	427,457	9,010,569	28,984,870	
11.....	1,319,923	861,550	1,476,621	92,850	9,676,782	29,464,299	
18.....		1,018,780		592,997	10,012,572	30,603,762	
26.....	1,287,967	358,554	1,393,179	202,000	8,955,208	29,729,199	
Mar. 3.....		1,427,556	382,508	667,282	8,734,028	31,820,840	
10.....	933,130	307,106	1,198,711	115,473	8,287,909	30,139,089	
17.....		870,578	152,000	429,260	8,099,409	31,271,247	
24.....		208,955	895,336	465,115	8,122,672	31,408,876	
31.....	1,032,314	1,343,059	155,110	706,006	8,026,492	31,447,251	
Apr. 7.....		576,107		310,088	7,562,865	30,162,017	
14.....	1,404,210	1,687,104	1,146,211	680,010	7,714,000	31,640,982	
21.....		1,496,889		241,503	7,531,488	30,764,897	
28.....	1,723,352	1,680,743	1,455,337	1,774,767	7,668,723	30,848,532	
May 5.....		2,169,197		2,355,117	7,041,143	30,856,889	
12.....	1,480,115	1,926,491	1,382,753	838,881	6,539,414	29,319,801	
19.....		2,223,578		1,251,177	6,864,148	30,599,341	
26.....	1,988,669	5,126,643	1,519,703	1,317,773	6,982,660	30,414,437	
June 2.....		2,325,972		1,719,138	6,621,100	31,196,553	
9.....	1,513,978	1,877,294		1,642,466	6,620,622	30,406,203	
15.....		1,669,263	1,385,652	2,526,478	6,426,755	30,537,000	
22.....		1,620,731		1,417,767	6,326,894	29,677,315	
29.....	2,041,237	1,861,163	1,541,580	1,962,776	6,253,357	28,717,607	
July 9.....		1,393,885		1,166,773	5,187,468	27,939,162	
14.....	1,736,861	2,495,127	1,514,884	1,283,135	5,404,367	28,156,061	
21.....		2,030,220	673,290	1,624,280	5,432,789	28,376,433	
28.....	2,145,000	2,344,040		1,880,497	5,112,942	28,212,668	
Aug 4.....		1,284,855	988,676	1,739,269	5,559,922	27,688,011	
11.....	1,860,274	1,505,389	1,006,283	1,357,198	5,732,534	27,312,274	
18.....		1,594,933		2,188,231	5,902,350	26,911,000	
25.....	2,126,332	1,584,879	798,832	1,730,696	5,985,545	26,105,279	
Sept. 1.....	*962,030	509,649	950,000	1,302,266	5,607,627	24,642,700	
8.....	2,046,006	2,363,385		1,198,893	5,333,650	24,721,300	
15.....		1,760,831	791,660	1,088,923	5,636,367	24,597,800	
22.....	2,042,363	2,727,194		533,843	5,448,304	24,435,400	
29.....		1,414,590	1,202,657	900,700	5,223,432	25,400,400	
Oct. 7.....	†2,350,670	727,981		689,419	4,991,875	25,139,300	
15.....	1,883,670	1,430,833	1,971,645	16,679	4,496,881	24,770,669	
20.....		1,109,603	810,225	1,032,439	4,564,642	26,669,870	
27.....	1,871,554	2,059,492		361,808	4,887,003	27,685,500	
Nov. 3.....		1,519,673	1,241,939	188,750	5,636,258	27,334,100	
10.....	1,568,107	1,068,407		195,320	5,733,746	26,862,100	
17.....		1,300,991	911,620	138,700	5,018,564	24,482,974	
24.....	1,721,342	none.	1,087,071	13,443	4,398,668	23,068,041	
Dec. 1.....		940,201	822,419	66,850	3,702,751	22,244,513	
8.....	1,869,429	675,697		44,023	3,125,300	21,688,043	
15.....		673,223	1,083,231	71,000	2,563,539	12,033,000	
22.....		152,512		2,010	2,939,300	23,266,900	
29.....	1,405,234	343,363	{ 1,225,217 5,491,685†		2,222,167	25,497,158	
Total.....	42,735,670	69,944,631	40,280,063	41,774,284			

* From New Orleans.

† \$300,000 silver from Mexico.

‡ From Europe.

	1860.		1861.		
	Received.	Exported.	Received.	Exported.	Specie in sub-treasury. Total in the city.
Jan. 7.....		\$85,080	1,482,857		
			1,338,100*		\$3,645,437
14.....	\$1,788,666	88,482	1,446,219		
			1,400,000*		2,584,455
Total.....	1,788,666	173,562	5,667,176		29,045,300

The export of specie of course stopped short, and the metal flowed into the port from both East and West, raising the amount in the city some \$8,000,000 between December 15 and January 12. But there were also considerable sums in the savings banks and other institutions than banks and Treasury. The amount received in the five weeks to January 12, was, it appears, \$13,467,109, without any exports. The amount in the banks and Treasury increased in the same time \$8,000,000, leaving \$5,400,000 that went elsewhere. The foreign gold pressed upon the mint, since, under present laws, it is not a legal tender in the foreign shape, although an effort was made to have the law altered in that respect. The operations of the New York assay-office were as follows:—

NEW YORK ASSAY-OFFICE.

	Foreign.				United States.			Payments	
	Gold.		Silver.		Gold.	Silver.		in	
	Coin.	Bullion.	Coin.	Bullion.		Coin.	Bullion.	Bars.	Coin.
Jan.	14,000	18,000	11,200	14,000	2,478,000	1,800	20,000	647,000	1,910,000
Feb.	5,000	28,000	6,500	24,000	951,000	....	7,500	932,000	90,000
Mar.	8,000	15,000	28,400	5,500	267,000	1,100	2,500	180,000	142,500
Apr.	8,000	32,000	14,500	10,000	183,000	3,700	8,800	187,000	70,000
May	11,200	20,800	25,500	18,000	176,000	7,000	16,500	230,000	45,000
June	12,000	19,000	10,000	4,000	147,000	1,750	2,750	158,000	38,500
July	9,500	18,000	12,800	8,000	159,500	1,200	3,000	140,000	72,000
Aug.	12,000	14,000	16,000	14,100	208,000	1,000	3,900	190,000	79,000
Sept.	13,000	41,000	7,500	14,000	323,000	....	8,500	350,000	57,000
Oct.	7,000	10,000	6,400	38,000	1,183,000	1,000	12,600	300,000	958,000
Nov.	14,000	13,000	30,800	9,000	3,423,000	....	27,000	67,000	3,500,000
Dec.	3,622,770	875,890	90,000	20,000	2,776,600	88,000	89,820	.....	7,563,170
'60	3,786,470	998,690	251,600	78,600	12,275,100	106,550	200,070	3,381,000	15,822,000
'59	123,000	147,000	431,580	79,900	4,005,600	14,400	99,320	3,971,000	1,629,100

The deposits of United States gold had become large in October for turning into coin, and still larger in November. In December the arrivals from abroad doubled the applications, and for that month \$7,563,170 was required in coin raising the aggregate for the year to ten times that of 1859. The mint could not respond to this demand, but its operations were as follows:—

UNITED STATES MINT, PHILADELPHIA.

	Deposits.		Coinage.			
	Gold.	Silver.	Gold.	Silver.	Cents.	Total
January.....	\$200,000	\$41,000	\$1,024,563	\$41,000	\$24,000	\$1,090,563
February.....	1,838,578	85,578	1,632,160	21,600	24,000	1,677,760
March.....	144,478	82,255	317,451	132,989	29,000	479,440
April.....	281,891	49,764	252,756	38,431	30,000	321,188
May.....	90,828	72,468	138,004	81,100	35,000	249,104
June.....	54,893	54,676	63,718	97,160	24,000	184,878

* From Europe.

	Deposits.		Coinage.			Total.
	Gold.	Silver.	Gold.	Silver.	Cents.	
July	97,041	14,181	101,975	87,000	16,680	205,655
August	132,133	22,741	No coinage.			
September ...	2,174,100	29,587	2,181,460	36,000	4,000	2,221,460
October	457,750	45,829	357,373	54,673	10,000	422,049
November	1,623,579	19,820	1,580,640	30,700	11,000	1,622,340
December	7,148,097	71,894	4,306,620	66,560	7,000	4,380,180
Total, 1860...	\$15,063,365	\$549,218	\$11,851,711	\$687,119	\$214,660	\$13,466,602
Total, 1859...	1,555,252	910,560	1,455,678	1,043,646	345,000	5,310,136

The United States Mint at Philadelphia and New Orleans have operated as follows for the year to December 31, 1860:—

	Deposits.		Coinage.			Total.
	Gold.	Silver.	Gold.	Silver.	Cents.	
Philadelphia..	\$15,063,365	\$549,218	\$11,851,711	\$687,119	\$214,660	\$13,466,602
New Orleans .	227,088	1,827,303	243,000	1,337,955	.....	1,580,955

The progress of events for the new year points to still larger operations, since the caution in buying goods, in face of large exports of produce, will draw the coin into the interior, following the already falling rates of internal exchange.

The imports of the past year for the port of New York show a decline in dutiable goods, and also in free merchandise, but the import of specie has been larger than for many years, with the exception of the panic year. The aggregates are as follows:—

FOREIGN IMPORTS AT NEW YORK.

Years.	Dutiable.	Free goods.	Specie.	Total.
1850.....	\$110,933,763	\$8,645,240	\$16,127,989	\$135,706,942
1851.....	119,592,264	9,719,771	2,049,543	131,361,578
1852.....	115,386,052	12,105,342	2,408,225	129,849,619
1853.....	179,512,412	12,156,887	2,429,088	194,097,652
1854.....	163,494,984	15,768,916	2,107,572	181,371,472
1855.....	142,900,661	14,103,946	855,631	157,860,238
1856.....	198,839,646	17,902,578	1,814,425	213,556,649
1857.....	196,279,862	21,440,784	12,898,083	230,618,129
1858.....	128,578,256	22,024,691	2,264,120	152,867,067
1859.....	213,640,363	28,708,732	2,816,421	245,165,516
1860.....	201,401,683	28,006,447	8,862,380	238,260,460

We annex a comparative summary of the receipts of some leading articles of foreign merchandise during the past year. The sugar imports have continued large:—

IMPORTS OF A FEW LEADING ARTICLES OF GENERAL MERCHANDISE.

	1857.	1858.	1859.	1860.
Books.....	\$663,447	\$530,789	\$777,470	\$754,096
Buttons.....	845,456	413,868	464,549	285,831
Cheese.....	120,479	96,166	101,796	165,057
China-ware.....	589,682	849,707	609,730	591,197
Cigars.....	2,610,879	1,863,736	2,820,403	1,867,231
Coal.....	460,399	738,696	533,613	619,787
Coffee.....	7,722,162	7,823,192	8,689,520	8,246,008
Earthenware.....	1,178,924	798,839	1,365,861	1,402,226
Furs.....	1,859,923	1,760,029	2,378,174	1,971,506
Glass, plate.....	481,751	422,923	592,111	814,003
India-rubber.....	609,840	587,200	707,517	1,168,383
Indigo.....	457,125	346,169	690,823	486,493
Leather and dressed skins ..	2,052,299	2,402,991	3,879,143	2,346,111
Undressed skins.....	6,590,173	6,304,391	8,914,682	5,144,752
Liquors—Brandy.....	1,812,201	885,011	2,683,089	2,018,930

	1857.	1858.	1859.	1860.
Metals—Copper and ore....	426,474	507,407	968,496	909,832
Sheathing copper.....	248,375			
Iron, bars.....	3,845,101	1,529,237	3,122,572	3,093,277
Iron, pig.....	501,096	356,807	607,180	612,752
Iron, railroad.....	3,070,762	370,093	1,642,015	699,535
Iron, sheet.....	706,872	293,008	509,688	544,820
Lead.....	2,035,464	1,492,124	1,551,996	2,012,044
Spelter.....	380,434	590,149	357,867	359,620
Steel.....	1,694,950	1,033,955	1,798,982	1,959,785
Tin and tinplates.....	4,669,951	8,667,093	4,899,905	5,006,743
Zinc.....	341,648	481,507	391,655	435,023
Molasses.....	5,197,047	1,379,946	1,902,994	1,940,508
Rags.....	882,181	649,774	1,057,502	906,921
Salt.....	318,885	373,885	321,051	375,927
Salt peter.....	162,658	.....	72,600	214,005
Sugar.....	20,698,865	17,667,676	18,700,529	25,062,119
Tea.....	5,399,964	6,002,032	7,540,351	8,354,122
Watches.....	2,954,702	1,676,019	2,697,037	2,264,625
Wines.....	2,011,691	821,506	1,757,021	3,121,945
Wool and waste.....	1,775,673	1,113,024	3,050,672	2,751,398

The Mercantile Agency, in reporting their list of failures for the last year, remarks as follows :—

For the nine months preceding October, the total number of failures was 3,076, with an indebtedness of \$45,332,138 ; and in the three months following, (October, November, and December,) 852 failures, with liabilities to the amount of \$38,687,633. Recent heavy suspension are not included. They would augment the amount materially. The first 3,076 were failures that occur in the ordinary course of business, and though the number is about as much as it was at the same time the year preceding, the amount is much smaller. The final weeding out of the remnants of 1857 was nearly reached. The second class, by the comparatively small number of houses that have yielded and by their proportionately excessive liabilities, shows the effect of the political crisis. Most of them were houses beyond suspicion both with the public and themselves. This increases the total for the year, showing \$34,019,771 against \$63,367,000 for 1859.

The tenor of the advices which reach us from all points South, warrants us in saying that no one need doubt the honorable intentions of the Southern merchant, and that his indebtedness will be faithfully discharged as promptly as events permit. There will be delay in settlement, but this delay will not arise from any premeditated cause or present desire to postpone payment. The reclamations on cotton last spring and at present, have had their influence in producing a stringent money market. For some two or three months during the spring, there was an average loss of \$7 50 per bale on all the cotton shipped. This loss had to be met mainly by bank accommodation, and this has compelled renewals in full, of accommodation paper through all the Southern bank centers. This has in a measure diverted the banking capital from business circles generally, prevented the moving of crops, and in fact stagnated capital and paralyzed business. Added to this, want of confidence, engendered by the present political crisis, will readily show that a very general extension will be needed by Southern merchants, and, as we think, safely given.

Since the panic of 1857, in consequence of the depressed and bankrupt condition of the West, the Southern trade has been courted very generally, and to an extent that induced large purchases beyond the wants and necessities of that section. The West has now recovered herself so far as to make the trade in that direction more desirable, and it will, in turn, be greatly sought after. We would guard our subscribers against encouraging this reaction too far.

STATISTICAL TABLE ACCOMPANYING ANNUAL CIRCULAR FOR JANUARY, 1861.

Total No. of sources per re- cord, 1860.	Failures, 1860. No. Liabilities.	Causes of failures —				Compromised since their failure, and average paid.	Likely to pay in full. No. Liabilities.								
		Speculating out- side regular busi- ness, overtrading, indorsing, &c. No. Liabilities.	Lack of resources— the capacity for business, free travelling, neg- lected busin &c. No. Liabilities.		Causes of failure, Swindlers. No. Liabilities.										
			No. Liabilities.	No. Liabilities.											
States.															
New York.															
New York city.....	17,369	498	\$32,137,297	923	\$14,410,367	84	\$4,208,400	28	\$1,515,000	92	\$1,903,500	100	av. 42 cts.	35	\$4,424,287
Albany.....	831	33	1,835,000	21	1,498,000	5	118,000	1	6,000	3	94,000	6	av. 87 cts.	1	75,000
Buffalo.....	880	59	598,000	17	417,000	8	44,000	1	50,000	3	85,000	1	av. 50 cts.	..	.....
Oswego.....	256	19	143,000	10	107,000	8	98,000	..	.....	1	10,000	..	.....	..	.....
Rochester.....	568	91	927,000	13	148,000	6	57,000	..	.....	3	93,000	3	av. 40 cts.	..	.....
Syracuse.....	409	16	198,000	10	78,000	3	31,000	..	.....	8	17,000	2	av. 25 cts.	..	.....
Troy.....	406	12	190,000	4	40,000	5	68,000	1	10,000	2	12,000	1	av. 25 cts.	1	10,000
Utica.....	397	12	135,000	4	18,000	4	35,000	3	79,000	1	2,000	..	.....	..	.....
Remainder of the State.....	19,113	251	2,805,500	99	1,538,200	70	458,500	21	201,000	61	612,500	26	av. 45 cts.	7	78,500
Massachusetts.															
Boston.....	4,940	172	4,956,700	89	2,817,700	57	1,394,060	14	447,000	12	208,000	111	av. 82 cts.	4	164,700
Remainder of the State.....	10,997	157	2,433,700	85	1,759,400	82	581,700	10	241,000	30	201,600	87	av. 44 cts.	..	.....
Pennsylvania.															
Philadelphia.....	8,961	144	6,107,936	75	3,983,000	40	1,225,042	16	213,000	11	677,933	40	av. 39 cts.	10	299,585
Pittsburg.....	1,288	29	226,618	9	44,258	14	183,890	4	9,000	2	41,000	19	av. 53 cts.	1	5,000
Remainder of the State.....	17,196	166	1,970,300	101	1,499,400	33	304,000	9	111,000	23	159,500	9	av. 65 cts.	2	18,000
Illinois.															
Chicago.....	1,380	56	1,368,569	96	690,292	10	192,864	9	164,281	11	241,392	43	av. 36 cts.	4	185,000
Remainder of the State.....	10,859	198	2,739,416	100	1,637,000	48	486,916	10	138,000	40	482,500	17	av. 49 cts.	11	801,000
Ohio.															
Cincinnati.....	2,673	63	1,926,950	31	1,124,750	14	828,400	6	102,900	12	367,000	31	av. 41 cts.	4	317,000
Cleveland.....	871	31	619,300	10	312,300	6	270,000	1	7,000	4	80,000	9	av. 55 cts.	1	15,000
Remainder of the State.....	16,197	195	1,699,400	116	983,900	31	280,400	14	147,200	84	196,900	14	av. 48 cts.	7	104,000
Louisiana.															
New Orleans.....	2,910	24	1,403,000	8	945,000	10	247,000	3	112,000	2	129,000	7	av. 34 cts.	3	140,000
Remainder of the State.....	2,109	12	178,000	3	52,000	4	81,000	1	10,000	4	65,000	..	....	..	.....
Missouri.															
St. Louis.....	1,853	56	2,024,500	29	1,192,500	9	149,000	10	455,000	9	295,000	9	av. 46 cts.	1	25,000
Remainder of the State.....	4,959	77	986,500	36	664,000	..	.....	..	.....	10	93,000	3	av. 50 cts.	..	.....
Rhode Island.															
Providence.....	1,056	21	793,000	14	570,000	22	132,500	8	101,000	1	7,000	7	av. 86 cts.	..	.....
Remainder of the State.....	918	16	201,500	9	204,000	4	160,000	2	107,000	8	18,000	1	av. 50 cts.	..	.....
Maryland.															
Baltimore.....	3,148	82	2,981,500	19	1,166,500	1	2,500	3	87,000	14	932,000	23	av. 42 cts.	11	570,500
Remainder of the State.....	2,967	38	183,000	13	82,000	40	672,000	9	111,000	5	93,000	..	.....	5	46,000

FOREIGN LETTERS.

Returned to England.....	41,835
“ France.....	18,400
“ Bremen.....	6,178
“ Hamburg.....	2,517
“ Prussia.....	17,317
“ Canada.....	25,800
“ New Brunswick.....	3,041
“ Nova Scotia.....	1,693
“ Prince Edward's Island.....	130
Total number of foreign letters.....	110,911

Persevering efforts have been made, so far as the limited number of clerks would permit, to find the true causes for the non-delivery especially of *valuable* letters, and the result has been to confirm the former experience of the department, as stated in the annual report of last year, and the special report of 7th May last. For example: out of 8,002 cases, in which the inquiries of the department have been answered, or where causes were patent without inquiry, 3,983 letters were misdirected, 621 illegibly directed, 583 directed to transient persons, 336 to persons moved away, 657 not mailed for want of postage, 885 directed to fictitious persons or firms, 54 without any address or direction, 34 missent, leaving, out of 8,002, only 1,341 letters properly addressed, and only 684 for the non-delivery of which the department is blamable, 657 having become dead because not prepaid.

In reference to the class of letters not containing money or other valuable inclosures, a similar state of facts seems to exist. The number returned to the dead letter office for want of postage during the past seven months, to November 1, was 22,259.

Out of 37,868 letters without inclosures, the number for want of proper direction was.....	10,178
Number entirely without address or direction.....	357
Total.....	10,535

Although the number of letters conveyed by mail during the year has increased by many millions, (as shown by the increased revenue of over \$500,000,) yet the whole number of dead letters, so far from increasing, has rather diminished. From this fact, it may be concluded that better attention than formerly is now given to the delivery of letters, and that the new regulations on the subject have had a salutary effect.

If the proper assistance could be obtained, further improvements might, no doubt, be made, and the propriety of authorizing the employment of temporary clerks to make experiments with the dead letters is urged, somewhat according to the plan proposed in the special report of May 7, 1860. It might, perhaps, be sufficient for the present simply to authorize the use of the dead letter man-

The imports of specie were in 1857 much larger than usual, owing not only to the return shipments caused by the beginning of the revulsion, but also to the previous receipts of foreign coin designed for reshipment to the West Indies, followed by the high price of sugar. This year the influence of the panic has caused specie to arrive only in the last month. The causes extend, however, into the new year. Under the head of dutiable, we have included above both the dutiable entered directly for consumption and the goods thrown into bonded warehouse. In the extended tables given below, these items are given separately, although brought together in the total. The following tables give the monthly returns of the exports under each head:—

FOREIGN IMPORTS ENTERED AT NEW YORK DURING THE YEARS 1857-8-9-60.

ENTERED FOR CONSUMPTION.

	1857.	1858.	1859.	1860.
January.....	\$15,800,034	\$4,170,017	\$15,566,727	\$16,521,174
February.....	18,508,939	5,840,256	15,231,446	14,467,040
March.....	12,850,457	7,245,526	15,314,023	16,168,698
April.....	11,165,530	5,837,546	15,595,141	10,407,966
May.....	5,451,191	6,574,612	15,222,311	10,515,411
June.....	2,471,723	6,652,563	14,909,315	11,870,400
July.....	26,042,740	14,053,659	21,681,460	18,759,905
August.....	14,401,018	15,067,732	18,416,207	19,564,675
September.....	8,841,367	11,180,523	12,470,440	11,516,139
October.....	2,791,905	9,234,470	9,345,609	10,974,428
November.....	2,792,185	7,350,323	9,978,720	8,525,416
December.....	2,829,924	9,775,511	13,043,310	5,374,246
Total.....	\$122,937,013	\$102,942,737	\$176,765,309	\$154,660,498

ENTERED FOR WAREHOUSING.

January.....	\$1,969,266	\$1,909,448	\$1,201,701	\$2,744,411
February.....	3,543,996	1,330,623	1,264,502	1,526,772
March.....	5,384,835	1,812,230	2,804,412	3,592,093
April.....	8,168,142	2,148,241	3,754,895	4,127,867
May.....	10,508,421	2,626,978	4,746,614	4,436,660
June.....	11,540,136	2,408,733	5,401,253	4,487,109
July.....	6,796,835	2,949,166	3,943,374	4,462,475
August.....	3,516,039	2,146,031	2,964,044	4,182,764
September.....	5,428,203	2,900,710	2,177,968	2,835,784
October.....	7,356,424	2,157,678	2,194,252	2,817,461
November.....	5,821,588	1,725,318	2,794,108	3,961,652
December.....	3,308,464	1,520,373	3,534,920	7,566,147
Total.....	\$73,342,349	\$25,635,519	\$36,875,054	\$46,741,185

FREE GOODS.

January.....	\$850,923	\$1,716,682	\$2,618,220	\$2,262,683
February.....	2,447,839	1,798,105	2,269,223	3,172,392
March.....	2,338,379	2,394,743	2,620,654	3,739,241
April.....	955,428	2,658,381	2,802,542	2,386,349
May.....	1,647,810	1,928,573	3,461,285	1,845,020
June.....	957,866	953,014	3,430,361	2,765,008
July.....	2,455,333	1,506,027	1,436,147	1,594,918
August.....	2,052,122	2,342,741	2,920,921	2,050,665
September.....	1,772,505	1,253,829	1,810,626	1,652,892
October.....	1,782,845	2,061,463	1,447,443	1,911,515
November.....	1,776,384	1,425,520	1,955,067	2,487,290
December.....	2,377,300	1,985,608	2,145,534	2,138,579
Total.....	\$21,444,734	\$22,024,691	\$28,703,732	\$28,006,447

SPECIE AND BULLION.

	1857.	1858.	1859.	1860.
January.....	\$886,509	\$309,572	\$71,803	\$228,050
February.....	1,023,718	240,059	92,209	190,175
March.....	1,061,833	277,203	81,666	85,094
April.....	939,218	524,857	272,441	49,186
May.....	1,070,833	324,540	122,436	96,060
June.....	369,901	102,132	496,392	38,272
July.....	505,298	86,895	175,139	64,351
August.....	17,319	67,682	348,419	140,750
September.....	885,285	138,233	184,558	255,695
October.....	2,509,193	89,368	630,645	1,088,838
November.....	3,027,803	90,446	167,037	446,798
December.....	681,123	63,133	184,638	6,174,061
Total.....	\$12,898,033	\$2,264,120	\$2,816,421	\$8,852,830

TOTAL IMPORTS.

January.....	\$19,006,782	\$8,105,719	\$19,447,962	\$21,756,273
February.....	25,524,492	9,209,043	18,848,870	19,356,879
March.....	21,135,504	11,729,702	20,820,456	23,580,126
April.....	21,218,318	11,169,025	22,425,619	16,971,358
May.....	18,705,255	11,454,703	23,552,645	16,893,151
June.....	15,389,126	10,116,442	24,089,821	19,160,789
July.....	35,800,206	18,506,747	27,286,120	24,881,649
August.....	19,986,493	19,624,176	24,649,591	25,938,854
September.....	16,847,360	15,473,295	16,648,535	16,260,450
October.....	14,439,867	18,542,984	18,617,946	16,787,242
November.....	13,417,960	10,591,606	14,895,002	15,421,156
December.....	9,196,811	13,344,625	18,908,398	21,253,033
Total.....	\$280,618,129	\$152,867,067	\$245,165,516	\$288,260,460

WITHDRAWN FROM WAREHOUSE.

January.....	\$2,672,755	\$4,504,591	\$2,088,270	\$2,964,024
February.....	2,501,696	4,733,708	2,167,898	2,338,649
March.....	2,639,223	4,444,415	1,712,231	2,200,117
April.....	2,287,315	3,203,539	1,543,551	2,069,423
May.....	2,262,173	2,690,888	1,628,434	2,475,067
June.....	781,099	2,360,140	2,369,281	2,268,377
July.....	10,470,820	3,164,538	2,595,063	3,598,993
August.....	5,624,147	3,116,013	3,296,084	3,325,105
September.....	2,882,046	2,505,062	2,893,741	4,007,272
October.....	1,750,392	2,462,425	2,749,892	3,018,393
November.....	3,152,316	2,124,655	1,970,134	1,597,801
December.....	3,684,908	1,789,620	1,840,754	1,246,203
Total.....	\$40,609,890	\$37,499,542	\$26,857,089	\$31,103,924

The warehouse operation for the last two months of the year show the same effects of panic as in 1857. The average quantities warehoused for the two months was half the arrival, instead of less than one-fourth as in the previous year.

The imports of foreign dry goods at the port of New York, for the year 1859, was more than double those of the previous year, but this year a decline has taken place designated as follows:—

IMPORTS OF DRY GOODS AT NEW YORK.

	1857.	1858.	1859.	1860.
Manufactures of wool.....	\$27,489,564	\$19,385,084	\$37,329,049	\$34,480,769
Manufactures of cotton.....	18,905,535	11,057,769	24,781,164	17,881,328
Manufactures of silk.....	28,537,260	19,558,274	33,682,648	34,996,867
Manufactures of flax.....	7,950,864	5,798,307	11,110,931	7,811,612
Miscellaneous.....	7,650,906	4,199,290	6,248,832	6,774,492
Total.....	\$90,534,129	\$60,005,224	\$118,152,624	101,944,468

The decline in dry goods is marked under each general head, with the exception of silk; but in those goods, as in general merchandise, the bulk of the decline is in the month of December.

We recapitulate the comparative totals of the imports of dry goods and general merchandise for the convenience of reference:—

	1857.	1858.	1859.	1860.
Dry goods.....	\$90,534,129	\$60,005,224	\$118,152,624	\$101,944,468
General merchandise.....	127,185,967	90,448,438	129,196,471	127,468,662
Total.....	217,720,096	150,453,662	\$247,349,118	\$229,408,130

The cash duties received at the port for the year are nearly seven per cent less than for the past year, arising from the fact that the panic sent such large quantities into warehouse:—

CASH DUTIES RECEIVED AT NEW YORK.

	1858.	1859.	1860.
January.....	\$1,641,474 59	\$3,478,471 38	\$3,899,166 17
February.....	2,063,784 86	3,328,688 93	3,578,043 28
March.....	2,213,462 15	3,164,011 25	3,477,545 74
April.....	1,786,510 41	3,212,060 49	2,444,267 96
May.....	1,748,227 54	4,014,520 39	2,466,462 76
June.....	1,685,663 02	3,314,429 55	2,024,193 39
July.....	3,387,305 33	4,861,246 89	4,604,066 04
August.....	3,545,118 01	4,248,010 43	4,496,243 10
September.....	2,672,935 68	2,908,509 95	3,038,803 26
October.....	2,054,834 43	2,818,750 32	2,632,078 38
November.....	1,706,529 47	2,157,154 48	1,794,748 67
December.....	2,020,895 62	2,843,388 59	1,171,862 74
Total.....	\$26,476,731 06	\$38,534,242 95	\$36,027,481 51

The most interesting feature of the commerce of the port is perhaps the exports, showing, as they do, such an immense increase over any previous period. In the last quarter particularly, the amount has run up until it reaches more than half the dutiable imports. The following is a quarterly summary:—

EXPORTS FROM NEW YORK TO FOREIGN PORTS, EXCLUSIVE OF SPECIE.

	1857.	1858.	1859.	1860.
First quarter.....	\$19,838,847	\$14,044,177	\$13,725,642	\$20,827,086
Second quarter.....	18,822,867	17,599,202	17,883,621	22,740,760
Third quarter.....	15,803,531	14,008,473	17,637,253	26,079,326
Fourth quarter.....	18,898,910	13,991,361	18,733,805	33,845,108
Total.....	\$73,364,155	\$59,638,212	\$67,980,321	103,492,280

This gives an increase of \$20,000,000 over the large exports of 1856, and an increase of \$44,000,000, as compared with 1858. The exports of specie, not included in the above, show a decrease of \$27,600,000.

We now annex our usual detailed statement showing the exports of domestic produce, foreign dutiable and free goods, and specie during each month of the last four years :—

EXPORTS FROM NEW YORK TO FOREIGN PORTS DURING THE YEARS 1857-8-9-60.

DOMESTIC PRODUCE.

	1857.	1858.	1859.	1860.
January.....	\$4,548,842	\$4,208,806	\$3,762,182	\$5,299,142
February	5,399,202	3,709,870	3,288,592	5,699,387
March.....	7,904,481	4,503,371	5,377,840	6,998,687
April.....	5,162,160	5,513,117	5,950,921	6,638,682
May.....	6,046,643	4,282,789	5,180,652	5,812,190
June.....	5,395,312	6,382,939	4,880,895	8,607,774
July.....	4,273,696	4,771,962	4,938,065	7,525,718
August	4,289,479	4,660,272	5,150,710	8,012,814
September	4,218,954	3,521,992	4,946,612	9,232,931
October.....	6,491,529	5,233,363	4,752,779	10,067,330
November.....	5,245,599	3,481,654	5,323,611	11,262,701
December.....	2,832,338	3,700,068	6,382,172	10,610,945
Total	\$61,808,235	\$53,949,703	\$59,929,531	\$95,468,296

FOREIGN DUTIABLE.

January.....	\$188,408	\$290,308	\$232,865	\$399,317
February.....	363,878	326,345	263,851	631,489
March.....	628,080	649,899	297,381	844,716
April.....	314,343	432,393	382,239	482,489
May.....	294,339	229,990	426,002	248,270
June.....	512,349	350,990	187,522	486,228
July.....	582,059	277,419	232,527	232,552
August.....	654,088	224,438	790,646	191,270
September	566,104	204,390	635,132	620,394
October.....	806,049	359,185	482,440	394,753
November.....	1,194,355	254,310	639,538	400,218
December.....	1,226,590	487,231	481,263	833,578
Total.....	\$7,331,144	\$4,087,398	\$5,050,909	\$5,765,274

FOREIGN FREE.

January.....	\$151,920	\$191,125	\$119,489	\$324,003
February	175,706	136,862	183,210	344,994
March.....	488,330	27,590	200,779	285,351
April.....	185,642	154,416	441,489	254,742
May.....	169,451	113,799	308,096	309,921
June.....	732,128	153,769	126,355	200,464
July.....	407,697	70,463	380,782	140,949
August	393,882	102,674	374,707	76,083
September	417,570	169,863	188,072	46,620
October.....	212,448	161,068	252,878	94,175
November.....	386,528	129,671	177,288	84,167
December.....	503,479	184,316	241,336	97,241
Total.....	\$4,229,776	\$1,601,111	\$2,999,888	\$2,258,710

SPECIE AND BULLION.

	1857.	1858.	1859.	1860.
January.....	\$1,807,946	\$4,745,611	\$2,805,688	\$853,562
February.....	1,831,726	3,746,920	2,371,427	977,009
March.....	2,174,965	886,194	3,343,677	2,381,668
April.....	3,854,805	646,285	6,259,167	2,995,602
May.....	5,789,266	1,790,775	11,421,032	5,529,936
June.....	7,939,354	594,174	7,469,981	8,842,080
July.....	3,628,877	2,801,496	10,051,019	6,563,985
August.....	6,271,717	2,201,802	6,409,788	7,454,813
September.....	990,476	3,239,591	8,267,681	3,758,734
October.....	297,252	3,028,405	5,344,159	2,106,395
November.....	3,239,231	471,970	4,383,123	525,091
December.....	7,535,032	1,898,208	2,062,129	202,401

Total \$44,860,174 \$26,001,431 \$69,715,866 \$42,191,171

TOTAL EXPORTS.

	1857.	1858.	1859.	1860.
January.....	\$6,192,116	\$9,435,350	\$6,419,696	\$6,876,024
February.....	7,770,512	7,920,497	6,107,060	7,652,879
March.....	11,190,856	6,017,064	9,219,678	10,510,417
April.....	9,026,950	6,746,211	13,083,866	10,371,415
May.....	12,300,199	6,397,353	17,335,782	11,900,317
June.....	14,579,143	7,486,872	12,691,153	17,836,546
July.....	8,891,829	7,921,340	15,602,393	14,463,199
August.....	11,609,166	7,189,186	12,725,846	15,734,980
September.....	6,193,106	7,135,836	14,087,497	13,658,679
October.....	7,607,280	3,782,016	10,832,256	12,662,653
November.....	10,065,713	4,837,605	10,523,560	12,272,177
December.....	12,097,459	6,270,323	9,167,400	11,745,165

Total..... \$117,724,329 \$85,639,643 \$137,696,187 \$145,683,451

We also present our annual comparative statement of the wholesale prices at this port of the leading articles of foreign and domestic produce, which will be found very interesting. There are few, even of those who are engaged in the trade, who can remember the changes in price from year to year, and this table, if preserved, will be found very useful for reference. We may now bring down our annual tables of prices for January 3d of each year. The result is generally lower figures notwithstanding the large exports of produce, under the supplies coming from good harvests:—

COMPARATIVE PRICES AT NEW YORK ON JANUARY 3D.

	1856.	1857.	1858.	1859.	1860.	1861.
Ashes, pots.....100 lbs.	\$7 00	\$7 75	\$5 75	\$5 62½	\$5 12½	\$5 00
Pearls.....	8 00	8 00	5 75	6 00	5 37½	5 00
<i>Breadstuffs—</i>						
Wheat flour, State....bbl.	8 31½	6 25	4 25	4 30	4 30	5 35
Wheat, best extra Genesee.	11 00	8 50	7 50	7 75	7 50	7 50
Rye flour, “	6 37½	5 00	4 00	3 75	4 00	4 00
Corn meal, Jersey.....	4 00	3 25	3 25	3 40	3 90	3 15
Wheat, white Gen....bush.	2 20	1 80	1 30	1 40	1 50	1 45
White Michigan.....	2 12½	1 75	1 20	1 25	1 50	1 45
White Ohio.....	2 12½	1 75	1 15	1 30	1 45	1 45
White Southern.....	2 16	1 78	1 25	1 45	1 45	1 45
Red Western.....	1 90	1 53	1 10	1 20	1 30	1 38
Rye, Northern.....	1 31	92	73	78	92	75
Oats, State.....	46	48	43	53	46½	37
Corn, old Western.....	94	68	65	78	90	72
Corn, new Southern.....	90	67	62	75	88	72½

	1856.	1857.	1858.	1859.	1860.	1861.
Cotton, mid. upland.....lb.	9½	13½	8½	12	11	12½
Mid. New Orleans.....	9½	13½	9	12½	11½	12½
Fish, dry cod.....qtl.	4 12½	3 50	3 25	4 00	4 50	3 50
Fruit, bunch raisins.....box	2 87½	3 80	1 95	2 05	2 52	1 75
Currants.....lb.	20	21	9	7½	6	4½
Hay, shipping.....100 lbs.	95	90	65	80	1 00	90
Hemp, r'gh American.....ton	170 00	208 00	100 00	125 00	145 00	152 50
Hops.....per lb.	10	10	10	15	16	25
Iron, Scotch pig.....ton	32 00	30 00	26 00	25 00	24 50	21 00
English bars.....	62 50	63 00	62 50	55 00	53 00	52 00
Laths.....per M.	1 45	1 31½	1 25	2 12½	2 00	1 30
Lead, Spanish.....ton	6 37½	6 00	4 75	5 50	5 65	5 25
Galena.....	6 87½	6 75	none	5 85	5 77½	5 50
<i>Leather—</i>						
Hemlock, sole, light....lb.	23½	32	22½	34	30	19½
Oak, " ".....	31	38	23	30	30	27
<i>Lime—</i>						
Com. Rockland.....bbl.	1 00	90	85	75	75	75
<i>Liquors—</i>						
Brandy, new cognac....gal.	4 75	5 00	4 25	3 00	3 00	3 00
Domestic whisky.....	85½	25	22	24½	26	19½
<i>Molasses—</i>						
New Orleans.....gal.	49	80	35	37	53	37
<i>Naval Stores—</i>						
Crude turpentine.....bbl.	3 00	4 00	2 87½	3 68½	3 43½	2 75
Spirits ".....gal.	41	48	38	49	44½	35
Common rosin, N. O....bbl.	1 60	1 60	1 30	1 55	1 65	1 25
Oils, crude, whale.....gal.	80	78	60	55	52	51
" sperm.....	1 80	1 30	1 00	1 36	1 40	1 40
Linseed.....	88	80	55	65	57	50
<i>Provisions—</i>						
Pork, old mess.....bbl.	16 75	19 50	15 40	17 00	16 37½	16 00
Pork, old prime.....	14 50	16 50	13 00	13 00	11 75	10 50
Beef, city mess.....	18 50	12 25	10 00	9 00	9 00	6 00
Beef, repacked Chicago...	14 50	12 25	12 50	9 50	9 50	9 00
Beef hams, extra.....	15 00	19 50	15 50	15 00	14 50	14 00
Hams, pickled.....lb.	10	10½	8½	9½	9½	8
Shoulders, pickled.....	8½	7½	6½	6½	6½	5½
Lard.....	11½	12½	9½	11½	10½	10½
Butter, Ohio.....	20	21	16	18	16	14
" State.....	23	24	20	20	20	18
" Orange County...	27	27	24	25	24	22
Cheese.....	11	10½	8	9	11	10
Rice, good.....100 lbs.	5 50	4 31½	3 25	3 50	4 20	1 60
<i>Salt—</i>						
Liverpool, ground....sack	92½	80	80	90	1 15	75
" fine, Ashton's...	1 55	1 55	1 30	1 38	1 95	1 60
Seeds, clover.....lb.	13	12½	9½	9½	8½	8½
<i>Sugar—</i>						
Cuba, good.....lb.	8	9½	7	7	7½	6½
Tallow.....	13	11½	10	10	10½	9½
Whalebone, polar.....	50	65	1 10	95	90	88
<i>Wool—</i>						
Common fleece.....	35	38	27	36	40	30

The decline in prices as compared with 1857 extends to nearly every article upon the list, and is very strongly marked. Cotton is almost the only article that maintains its place.

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

CITY WEEKLY BANK RETURNS.

NEW YORK BANK RETURNS.—(CAPITAL, JAN., 1860, \$69,833,682; 1861, \$69,890,475.)

		Loans.	Specie.	Circulation.	Deposits.	Average clearings.	Actual deposits.
1760	Jan. 7	124,597,668	17,863,734	8,539,063	97,493,709	22,664,864	74,808,855
	14	123,582,414	18,740,866	8,090,648	99,247,743	23,363,980	75,883,763
	21	123,845,981	19,233,494	7,880,865	99,644,128	22,818,547	76,830,681
	28	123,088,626	20,063,739	7,760,761	98,520,793	21,640,967	76,879,826
	Feb. 4	124,091,982	19,924,301	8,174,460	99,476,430	21,898,788	77,577,694
	11	123,336,629	19,787,667	8,185,109	98,146,463	21,674,908	76,471,055
	18	124,206,031	20,591,189	8,050,001	100,387,051	22,061,811	78,325,240
	25	124,898,239	20,778,896	7,928,595	100,622,481	22,151,504	78,470,977
	Mar. 3	125,012,700	23,086,812	8,165,026	103,663,462	22,787,290	80,876,172
	10	127,301,778	21,861,180	8,419,633	104,818,906	23,791,958	81,021,948
	17	127,562,848	23,171,833	8,380,999	108,560,981	25,562,868	82,998,123
	24	127,613,507	23,286,204	8,335,266	107,506,395	25,397,976	82,107,419
	31	128,388,228	23,420,759	8,444,327	106,311,554	22,899,523	83,422,031
	Apr. 7	130,606,731	22,599,132	8,929,228	109,193,464	25,556,629	83,536,335
	14	129,919,015	23,626,982	8,775,297	109,153,863	24,256,270	84,897,593
	21	128,448,868	23,233,314	8,790,459	108,145,233	25,768,785	82,386,498
	28	127,085,667	23,279,809	8,749,048	103,206,723	21,391,290	81,816,433
	May 5	127,479,520	23,815,746	9,391,861	108,505,388	26,546,063	81,59,325
	12	126,184,532	22,780,387	9,153,311	108,038,848	27,602,174	80,936,674
	19	124,938,889	23,735,193	9,035,522	106,229,724	25,339,444	80,890,280
	26	125,110,700	23,431,773	8,826,473	104,433,136	24,309,496	80,123,640
	June 2	124,792,271	24,585,457	8,774,063	104,268,785	22,888,107	81,380,678
	9	125,431,963	23,785,681	8,999,948	103,886,091	22,776,108	80,609,938
	16	125,399,997	24,110,553	8,828,786	104,031,268	22,492,614	81,538,654
	23	125,886,565	23,850,521	8,777,115	102,737,055	22,116,242	80,620,812
	30	127,208,201	22,434,260	8,745,182	102,496,762	21,309,053	81,187,709
	July 7	127,244,241	22,751,694	9,543,727	103,450,426	22,119,106	81,331,320
	14	127,123,166	23,641,357	8,075,528	106,899,678	23,456,447	82,943,231
	21	128,427,489	23,443,644	8,333,619	107,717,216	23,457,781	84,259,433
	28	129,074,298	23,099,726	8,760,252	105,524,100	21,239,450	84,284,650
	Aug. 4	130,118,247	22,128,189	9,176,386	107,264,777	23,417,789	83,846,968
	11	129,855,179	21,579,740	9,129,835	105,505,399	22,626,292	82,879,107
	18	129,950,346	21,008,701	9,088,648	105,990,481	22,994,365	82,756,116
	25	130,578,997	20,119,779	9,142,006	104,423,122	22,438,949	81,989,173
	Sept. 1	129,029,175	19,035,029	9,253,682	102,229,586	22,561,086	79,663,998
	8	127,999,839	19,187,713	9,536,824	101,185,086	24,072,405	77,112,681
	15	127,002,728	18,960,749	9,494,332	101,117,627	24,257,872	76,859,755
	22	125,802,644	18,988,603	9,480,871	101,311,780	25,556,849	75,764,981
	29	124,849,426	20,177,986	9,487,637	101,533,834	25,150,441	76,333,393
	Oct. 6	123,337,157	20,147,828	9,370,507	103,281,058	23,104,322	75,176,736
	13	122,307,138	20,273,708	9,337,288	100,753,185	25,930,584	74,822,601
	20	121,908,502	22,115,228	9,261,990	104,092,356	27,837,519	76,554,837
	27	123,362,626	22,798,590	9,123,103	106,999,379	23,933,760	78,065,619
	Nov. 3	125,234,584	22,194,982	9,429,423	109,363,013	23,673,601	79,679,412
	10	125,636,715	21,125,429	9,548,112	105,551,805	25,526,509	79,025,296
	17	123,271,024	19,464,410	9,266,317	104,503,728	23,614,065	76,189,663
	24	122,518,454	18,759,373	8,968,442	99,616,606	25,580,807	74,035,799
	Dec. 1	129,537,459	18,541,762	8,805,944	104,354,339	23,631,821	80,722,718
	8	130,214,363	18,562,743	8,956,193	102,072,145	19,587,978	82,184,167
	15	131,740,132	18,348,398	8,675,793	101,932,071	17,717,677	83,214,394
	22	132,152,299	20,326,970	8,284,172	104,128,509	18,251,633	86,876,876
	29	131,316,258	23,276,058	8,287,582	106,452,616	19,267,022	87,165,594
	Jan. 5	129,625,465	24,339,475	8,698,233	105,653,408	19,198,973	86,454,430
	12	129,125,515	26,460,988	8,337,193	108,700,247	20,551,364	88,148,883
	19	126,074,520	24,598,783	8,067,570	109,891,318	20,203,122	89,638,696

BOSTON BANKS.—(CAPITAL, JAN., 1859, \$85,125,488; 1860, \$87,258,600.)

		Loans.	Specie.	Circulation.	Deposits.	Due to banks.	Due from banks.
Jan.	2 ..	59,807,566	4,674,271	6,479,488	18,449,305	7,645,222	6,848,374
	16 ..	60,068,941	4,478,841	6,770,624	17,758,002	7,867,400	6,785,288
	23 ..	59,917,170	4,182,114	6,486,189	17,378,070	7,784,169	6,516,532
	30 ..	59,491,387	4,172,325	6,199,485	17,468,054	7,888,370	6,517,541
Feb.	6 ..	50,705,422	4,249,594	6,307,922	17,900,002	7,259,708	6,656,460
	13 ..	59,998,784	4,462,898	6,364,320	17,271,596	7,426,589	6,598,702
	20 ..	60,115,836	4,577,384	6,305,537	17,597,881	7,480,060	6,549,382
	27 ..	59,927,917	4,714,034	6,411,578	18,020,239	7,700,580	7,480,954
March	5 ..	59,993,784	5,034,787	6,896,666	18,645,621	7,786,290	7,768,074
	12 ..	59,885,196	5,328,610	6,430,643	18,898,293	7,715,663	7,390,935
	19 ..	60,258,208	5,446,840	6,405,084	18,660,205	.....	.....
	26 ..	60,180,209	5,627,961	6,328,278	18,742,817	8,351,016	7,804,222
Apr.	2 ..	60,050,953	6,045,703	6,840,268	19,262,894	8,473,775	8,080,218
	9 ..	60,668,559	6,320,561	7,753,491	20,469,893	9,206,161	9,788,121
	16 ..	61,189,629	6,289,719	7,267,165	20,291,620	9,160,868	8,314,312
	23 ..	61,035,965	6,315,952	7,152,766	20,266,917	9,055,077	8,188,121
	30 ..	61,269,552	6,317,949	6,992,908	20,195,951	9,273,558	7,948,086
May	7 ..	61,614,199	6,311,714	7,322,813	20,810,086	9,116,514	8,324,391
	14 ..	61,744,290	6,263,535	7,076,071	20,758,862	9,210,132	8,209,699
	21 ..	61,724,621	6,268,919	7,081,306	20,726,996	9,197,894	8,241,899
	28 ..	61,258,986	6,201,118	6,660,595	20,320,518	9,057,822	8,272,557
June	4 ..	61,585,669	6,192,455	6,800,711	20,666,295	9,172,878	8,866,511
	11 ..	62,846,519	6,300,700	7,090,282	20,228,677	9,629,483	7,857,439
	18 ..	63,085,953	6,322,698	7,165,453	20,677,636	9,988,840	7,991,098
	25 ..	63,557,155	6,282,930	7,188,326	20,760,673	10,307,194	8,188,802
July	2 ..	64,172,028	6,059,370	6,925,022	20,828,714	10,300,178	7,527,888
	9 ..	65,039,459	6,087,718	7,932,653	21,133,175	11,304,893	9,105,876
	16 ..	65,153,413	5,685,922	7,560,636	20,312,421	11,098,306	7,995,220
	23 ..	64,852,961	5,335,523	7,523,745	19,751,318	11,093,127	8,158,425
	30 ..	64,460,289	5,212,470	6,848,834	19,296,454	10,353,708	6,961,414
Aug.	6 ..	64,777,963	5,164,006	7,127,254	19,610,274	9,923,931	7,378,456
	13 ..	64,840,527	5,128,628	7,075,440	19,157,661	9,851,112	6,816,650
	20 ..	64,650,278	5,068,925	7,107,097	18,700,624	9,772,788	6,781,286
	27 ..	64,916,345	4,966,105	6,790,817	18,965,057	9,656,546	6,956,287
Sept.	3 ..	64,054,318	5,051,016	6,759,683	19,235,834	9,681,885	7,364,997
	10 ..	64,568,627	5,330,357	7,241,099	19,297,692	9,483,486	7,238,107
	17 ..	64,739,371	5,381,366	7,078,175	19,032,822	9,479,905	6,755,991
	24 ..	64,639,800	5,376,494	7,151,186	19,458,083	9,456,841	7,218,410
Oct.	1 ..	64,662,239	5,377,112	7,188,844	19,900,786	9,439,696	7,525,447
	8 ..	64,671,820	5,315,009	7,951,028	20,811,889	9,504,474	8,639,105
	15 ..	64,488,073	5,277,370	7,761,043	20,808,408	9,419,914	8,305,406
	22 ..	64,213,174	5,196,893	7,966,762	20,606,306	9,708,676	9,061,273
	29 ..	63,822,365	5,089,490	7,542,859	20,259,916	9,070,687	8,215,458
Nov.	5 ..	64,040,382	4,856,055	7,607,932	20,096,590	9,015,647	8,186,684
	12 ..	64,089,033	4,818,274	7,791,905	19,647,449	9,088,185	8,023,214
	19 ..	64,150,613	4,518,341	7,705,674	19,384,362	9,121,890	8,341,588
	26 ..	62,719,557	3,890,074	7,345,893	17,964,675	8,334,922	7,915,718
Dec.	3 ..	62,069,772	3,553,157	7,459,377	17,327,850	7,886,384	7,993,210
	10 ..	61,870,655	3,582,677	7,244,907	17,176,778	7,684,065	7,723,272
	17 ..	61,426,446	3,491,348	6,619,199	17,295,778	7,032,608	7,282,821
	24 ..	61,159,236	3,679,252	6,378,925	17,523,617	7,101,761	7,328,908
	31 ..	61,532,755	3,978,807	6,369,315	18,101,474	7,467,509	7,676,209

PHILADELPHIA BANKS.—(CAPITAL, JAN., 1860, \$11,783,190.)

	Date.	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan.	2....	25,386,887	4,450,261	2,856,601	14,982,919	2,619,192
	9....	25,248,051	4,463,252	2,676,623	14,161,437	2,596,212
	16....	25,275,219	4,561,998	2,672,730	14,934,517	2,563,449
	23....	25,445,787	4,514,579	2,644,191	15,064,970	2,601,271
	30....	25,526,198	4,585,321	2,601,750	15,401,915	2,619,573
Feb.	6....	25,493,975	4,669,929	2,666,310	15,409,241	2,574,015

	Loans.	Specie.	Circulation.	Deposits.	Due bank.
13....	25,498,975	4,669,929	2,656,310	15,409,241	2,574,015
20....	25,468,854	4,581,856	2,668,695	14,864,302	2,782,306
27....	25,558,918	4,706,108	2,653,192	14,590,092	3,115,010
Mar. 5....	25,742,447	4,816,052	2,697,108	15,192,971	3,183,312
12....	25,742,447	4,816,052	2,697,108	15,192,971	3,183,312
19....	25,882,077	4,873,419	2,785,345	15,205,432	3,209,553
26....	26,043,772	4,992,542	2,764,773	15,698,622	3,198,530
April 2....	26,405,229	5,060,274	2,858,812	15,558,269	3,652,757
9....	27,214,254	5,209,576	3,528,762	15,528,762	4,085,695
16....	27,444,580	5,415,711	3,252,186	16,012,140	4,164,678
23....	27,545,351	5,464,280	3,154,285	16,613,616	3,985,110
30....	27,571,002	5,453,470	3,087,846	16,529,891	3,902,514
May 7....	27,590,212	5,477,019	2,968,444	16,763,609	3,781,987
14....	27,463,831	5,537,360	2,944,245	16,489,872	4,209,845
21....	27,401,926	5,367,416	2,870,617	16,422,335	4,085,882
28....	27,283,932	4,886,579	2,818,719	15,884,903	3,974,369
June 4....	27,171,002	4,582,610	2,824,471	15,620,293	3,744,431
11....	27,046,016	4,183,667	2,810,552	15,698,909	3,128,287
18....	26,882,709	4,222,644	2,725,269	15,642,639	3,109,639
25....	26,780,533	4,329,638	2,654,508	15,643,433	3,060,615
July 2....	26,835,868	4,305,866	2,960,381	15,824,391	3,159,819
9....	26,835,868	4,305,866	2,960,381	15,824,391	3,159,819
16....	26,878,435	4,403,167	2,859,852	15,796,205	3,313,195
23....	26,842,743	4,553,641	2,821,082	15,966,734	3,099,567
30....	26,851,776	4,249,304	2,785,718	16,085,967	3,211,855
Aug. 6....	26,936,227	4,800,443	2,837,207	16,369,525	3,097,389
13....	26,830,307	4,768,405	2,849,340	15,671,260	3,261,584
20....	26,836,337	4,771,772	2,854,653	15,588,318	3,275,683
27....	27,095,028	4,757,917	2,835,524	15,923,769	3,185,826
Sept. 3....	27,095,028	4,257,917	2,835,524	15,923,769	3,235,107
10....	27,224,180	4,763,709	2,891,376	16,103,815	3,243,168
17....	27,492,859	4,741,624	2,909,887	16,313,516	3,305,117
24....	27,760,486	4,632,878	2,887,640	16,453,442	3,151,218
Oct. 1....	27,933,753	4,676,099	2,832,280	16,852,538	3,300,354
8....	28,113,980	4,561,947	3,005,354	16,879,463	3,183,699
15....	28,119,333	4,507,980	3,016,060	16,786,933	3,124,499
22....	28,233,640	4,567,435	2,888,304	16,867,020	3,126,237
29....	28,305,277	4,417,421	2,849,768	16,815,563	3,143,517
Nov. 5....	27,900,337	4,167,967	2,887,613	16,739,326	2,659,627
12....	27,864,659	4,011,943	2,892,212	16,264,245	2,427,153
19....	26,775,878	4,115,932	2,791,752	15,833,121	2,424,087
26....	26,576,322	3,844,542	2,640,912	14,699,679	2,720,574
Dec. 3....	26,973,207	3,333,827	2,557,903	15,054,180	3,237,424
10....	27,087,537	3,557,067	2,661,196	15,173,347	2,896,360
17....	27,084,858	3,711,247	2,626,984	15,379,864	3,045,982
24....	27,072,905	3,838,080	2,629,430	15,216,612	3,281,098
31....	26,927,097	3,284,464	2,610,716	15,133,744	3,482,991

NEW ORLEANS BANKS.—(CAPITAL, JAN., 1860, \$18,917,600.)

	Shortloans.	Specie.	Circulation.	Deposits.	Exchange.	Distant balances.
Jan. 7 ..	25,022,456	12,284,448	12,038,494	18,563,804	7,323,530	1,557,174
14 ..	24,928,909	12,386,735	12,417,847	18,678,233	7,410,360	1,387,704
21 ..	24,699,024	12,321,411	12,809,512	18,664,355	7,423,629	1,377,796
28 ..	24,916,431	12,318,159	12,882,184	19,677,121	8,144,681	1,603,763
Feb. 4 ..	25,145,274	12,750,642	13,215,494	19,565,305	8,003,380	1,613,036
11 ..	25,197,351	12,741,831	13,343,924	19,244,847	7,349,365	1,396,150
18 ..	25,005,952	12,894,521	13,458,989	19,903,519	7,886,609	1,470,787
25 ..	24,397,286	12,945,204	13,600,419	19,218,590	8,083,929	1,635,526
Mar. 3 ..	24,946,210	12,952,002	13,860,399	20,116,272	8,027,049	1,092,475
10 ..	24,088,800	13,089,092	13,726,554	19,771,423	8,582,012	1,601,149
17 ..	24,054,845	12,729,856	13,797,154	19,304,618	8,498,790	1,713,310
24 ..	23,832,766	12,610,790	13,835,755	19,102,063	8,342,699	1,738,246

	Short loans.	Specie.	Circulation.	Deposits.	Exchange.	Distant balances.
31 ..	28,674,714	12,437,195	13,975,624	18,681,020	8,149,061	1,610,499
Apr. 7 ..	28,107,740	12,868,071	14,100,890	18,070,209	8,560,117	1,942,066
14 ..	22,422,203	12,290,539	13,638,089	17,849,018	8,179,441	1,608,463
21 ..	22,380,038	12,100,687	12,999,204	18,380,033	7,649,069	1,649,060
28 ..	21,437,974	11,910,861	12,783,749	17,699,538	7,686,684	1,877,017
May 5 ..	21,437,974	11,910,861	12,783,749	17,699,538	7,686,684	1,877,017
12 ..	20,545,529	11,672,364	12,258,444	17,442,974	7,213,833	1,763,871
19 ..	19,885,119	11,706,007	12,163,609	17,260,226	6,909,886	1,680,480
26 ..	18,588,492	11,593,719	11,900,864	17,938,774	6,599,676	1,596,210
June 2 ..	18,282,807	11,191,024	11,791,799	16,985,565	6,173,783	1,459,051
9 ..	17,423,118	11,072,286	11,572,259	16,989,537	5,958,996	1,442,041
16 ..	16,864,692	10,693,369	11,389,389	16,105,566	5,538,830	1,665,076
23 ..	16,821,969	10,223,276	11,138,434	15,319,947	5,067,682	1,739,481
July 7 ..	16,627,125	9,883,812	10,921,057	14,671,491	4,548,395	1,601,540
14 ..	16,795,336	9,693,954	10,695,884	14,557,417	4,123,242	1,401,304
21 ..	16,945,426	9,544,793	10,310,824	14,326,547	3,706,020	1,512,608
28 ..	17,802,024	9,607,448	10,071,388	14,358,384	3,219,947	1,163,961
Aug. 4 ..	19,006,951	9,780,130	9,786,684	14,264,107	2,900,039	1,318,398
11 ..	19,383,879	9,346,131	9,526,934	14,363,664	2,565,150	1,182,381
18 ..	20,313,484	9,801,133	9,357,964	14,107,235	2,119,789	1,299,462
25 ..	21,332,318	9,900,424	9,263,374	13,614,301	1,756,034	1,346,314
Sept. 1 ..	22,049,988	9,907,517	9,196,144	13,303,771	1,431,300	1,081,223
8 ..	22,241,708	9,939,917	9,056,744	13,555,731	1,308,873	929,618
15 ..	23,144,157	9,851,213	8,929,404	13,546,294	1,344,390	1,078,178
22 ..	23,871,973	9,316,247	8,872,808	13,403,925	1,463,612	1,077,600
29 ..	24,285,360	9,691,812	8,752,344	13,978,031	2,016,320	980,638
Oct. 6 ..	24,670,487	9,765,171	8,683,759	14,084,071	2,136,911	810,469
13 ..	24,630,084	9,933,431	8,344,109	14,333,090	2,291,278	817,460
20 ..	24,670,161	9,988,225	8,296,660	14,759,556	3,037,312	790,404
27 ..	24,456,180	10,008,169	8,163,109	15,581,396	3,940,930	691,524
Nov. 3 ..	24,440,677	10,043,180	8,267,044	15,439,008	4,225,153	891,986
10 ..	23,443,541	10,219,761	8,063,239	15,581,600	4,913,074	721,008
17 ..	22,593,487	10,350,025	7,892,024	15,377,754	5,032,845	849,955
24 ..	22,141,224	11,050,367	7,463,239	14,948,236	5,160,203	1,173,037
Dec. 1 ..	21,532,975	10,626,491	7,170,297	14,689,064	5,380,293	871,776
8 ..	20,233,586	11,021,320	6,853,084	15,063,126	5,830,333	794,279
15 ..	19,379,680	11,560,173	6,434,922	15,625,928	5,742,700	700,125
22 ..	18,684,358	12,684,493	6,249,679	15,904,311	5,709,818	803,528
29 ..	18,144,481	13,656,033	6,178,374	17,036,848	6,073,413	877,183

PITTSBURG BANKS.—(CAPITAL, \$4,160,200.)

	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan. 16	7,202,367	980,530	2,080,548	1,527,548	304,562
23	7,060,471	1,022,273	2,012,478	1,545,103	255,076
30	6,989,320	1,003,037	1,896,363	1,555,686	265,804
Feb. 6	6,984,209	997,539	1,907,323	1,609,692	230,426
13	6,939,052	951,638	1,833,093	1,602,311	191,222
20	6,957,621	988,306	1,868,598	1,643,703	175,061
27	7,022,230	991,377	1,821,283	1,760,957	224,434
Mar. 5	7,101,459	1,018,255	1,871,373	1,768,879	273,343
12	7,035,624	999,093	1,901,543	1,651,216	197,007
19	7,066,774	1,004,750	1,945,323	1,636,887	198,556
26	7,038,891	981,560	1,980,732	1,572,130	192,411
Apr. 2	7,166,377	1,005,415	2,085,583	1,601,167	191,101
9	7,206,737	990,962	2,072,373	1,693,230	171,100
16	7,159,568	1,018,445	2,071,373	1,651,362	187,255
23	7,278,279	1,156,278	2,024,138	1,897,493	240,143
30	7,234,761	1,141,373	1,995,053	1,913,537	175,671
May 5	7,234,761	1,141,373	1,995,053	1,913,537	175,671
12	7,263,197	1,088,351	2,011,258	1,890,810	215,765
19	7,196,493	1,133,719	2,022,938	1,906,773	213,944
27	7,190,192	1,122,057	1,952,683	1,913,321	206,316
June 4	7,232,963	1,089,751	1,907,248	1,919,903	277,978

	Loans.	Specie.	Circulation.	Deposits.	Due banks.
11.....	7,214,889	1,126,808	1,919,688	1,892,800	240,728
18.....	7,247,541	1,102,446	2,029,558	1,743,915	271,062
26.....	7,291,888	1,150,248	2,048,858	1,779,752	316,858
July 14.....	7,310,663	1,068,974	2,071,448	1,818,515	239,832
21.....	7,294,891	1,088,220	2,073,598	1,846,879	205,011
28.....	7,215,944	1,098,084	2,069,803	1,861,817	167,871
Aug. 6.....	7,208,057	1,130,002	2,018,628	1,860,848	234,846
18.....	7,158,260	1,123,027	1,990,498	1,858,759	175,924
20.....	7,093,091	1,152,198	2,007,653	1,859,418	239,790
27.....	7,047,761	1,167,884	2,084,758	1,843,750	232,181
Sept. 8.....	7,145,776	1,159,428	2,124,008	1,905,667	240,419
10.....	7,139,564	1,225,151	2,196,573	1,904,828	222,155
17.....	7,121,227	1,188,707	2,299,438	1,819,248	210,274
24.....	7,107,947	1,246,526	2,341,363	1,881,865	238,058
Oct. 8.....	7,109,573	1,318,187	2,354,303	1,962,570	211,260
16.....	7,048,506	1,316,266	2,384,208	1,959,786	186,111
22.....	7,122,862	1,317,051	2,443,188	1,924,511	215,888
29.....	7,109,206	1,379,594	2,424,788	1,949,736	244,903
Nov. 5.....	7,262,599	1,400,485	2,416,713	2,088,882	250,121
12.....	7,192,918	1,419,264	2,384,496	2,077,671	178,025
19.....	7,280,758	1,403,583	2,509,791	1,948,833	192,985
26.....	7,287,895	1,290,069	2,513,097	1,856,161	321,010
Dec. 8.....	7,306,180	1,319,860	2,483,686	1,961,797	272,203
10.....	7,286,705	1,314,286	2,494,871	1,905,937	248,243
17.....	7,307,257	1,297,744	2,521,086	1,863,765	244,051
24.....	7,298,860	1,289,938	2,533,151	1,828,041	219,051

ST. LOUIS BANKS.

	Exchange.	Circulation.	Specie.
Jan. 7.....	4,873,543	538,555	662,755
14.....	4,467,513	520,305	642,497
21.....	4,352,699	502,175	580,754
28.....	4,290,563	495,880	568,335
Feb. 4.....	4,149,236	457,095	590,502
11.....	4,048,593	424,605	625,043
18.....	3,906,896	391,605	639,450
25.....	3,951,433	399,085	630,877
March 3.....	3,891,263	395,905	689,301
10.....	3,998,827	377,935	651,302
17.....	3,963,924	377,355	641,252
24.....	3,880,915	356,245	664,179
31.....	3,790,291	340,095	685,984
April 7.....	3,862,454	344,680	657,321
14.....	3,868,345	325,950	676,858
21.....	3,852,614	314,860	601,014
28.....	3,694,877	306,750	678,234
May 6.....	3,609,648	301,800	746,176
12.....	3,688,644	294,115	808,918
19.....	3,695,707	285,140	826,793
26.....	3,767,936	278,540	671,669
June 2.....	3,879,617	255,210	627,942
9.....	3,823,735	253,780	656,358
16.....	3,888,763	244,860	682,917
23.....	3,967,032	235,935	705,764
30.....	3,825,423	206,749	804,983
July 7.....	3,736,695	199,885	791,729
14.....	3,892,096	152,025	684,358
21.....	3,679,192	191,375	752,397
28.....	3,625,333	177,620	658,853
Aug. 4.....	3,526,098	173,310	633,795
11.....	3,540,196	176,115	637,810

		Exchange.	Circulation.	Specie.
	18.....	3,560,267	188,375	714,046
	25.....	3,599,470	220,605	728,545
Sept.	1.....	3,588,644	222,600	700,897
	8.....	3,630,708	233,190	714,496
	15.....	3,778,135	240,560	709,193
	22.....	3,814,863	253,605	679,617
	29.....	3,995,986	240,300	722,368
Oct.	6.....	4,027,365	255,765	677,522
	13.....	4,125,563	254,950	646,195
	20.....	4,262,411	239,210	552,336
	27.....	4,391,887	277,235	570,566
Nov.	3.....	4,477,847	315,800	597,780
	10.....	4,484,016	298,365	596,923
	17.....	4,474,864	274,125	543,395
	26.....	4,499,182	235,970	511,555
Dec.	1.....	4,556,218	229,020	494,785
	8.....	4,830,301	246,310	515,482

PROVIDENCE BANKS.—(CAPITAL, \$14,903,000.)

	Loans.	Specie.	Circulation.	Deposits.	Due banks
Jan. 2.....	19,144,354	315,917	2,011,336	2,635,436	938,508
Feb. 6.....	19,144,846	326,297	1,958,540	2,566,168	921,779
Mar. 3.....	19,009,255	342,965	1,917,693	2,698,169	970,971
Apr. 1.....	18,686,210	343,992	1,952,022	2,640,170	1,040,260
May 7... ..	18,893,653	448,413	2,045,590	2,773,248	1,356,071
June 4.....	18,891,907	422,726	1,938,254	2,844,012	1,210,104
July 2... ..	19,243,061	430,128	2,158,904	2,790,587	1,115,951
Aug. 6.....	19,530,296	397,286	2,218,347	2,748,678	1,169,800
Sept. 3.....	19,566,718	357,138	2,128,957	2,526,943	1,082,109
Oct. 1.....	19,834,817	337,851	2,183,347	2,590,103	894,204
Nov. 5.....	19,901,328	368,551	2,092,267	2,723,904	1,170,866
Dec. 3.....	19,748,430	343,153	1,992,963	2,648,232	1,164,102
Jan. 7.....	19,824,406	376,404	2,019,652	2,582,258	1,107,289

PIKE'S PEAK GOLD REGION.

Two years ago the first house was built upon the present site of Denver, by Gen. WILLIAM LARIMER and his party, who had just arrived from Leavenworth. It was a rude log-cabin, only six feet high, with a dirt roof. Now, Denver has three daily newspapers, two churches, a theater, several brick blocks, which are unsurpassed in any city west of St. Louis, and a population of 5,000.

A gentleman who has been canvassing the mining region for a business directory, furnishes some interesting statistics. There are 175 quartz mills in the mountains, which, upon the ground, in running order, cost in the aggregate about \$1,800,000; 75 of them have already been put in operation, and the owners generally state that they are doing well.

About one thousand people are engaged in selling goods in the Pike's Peak region. The number of loaded freight wagons going there from the Missouri River during the current year will nearly reach twenty thousand. Messrs. CLARK, GRUBER & Co. have already put in circulation upward of a hundred and twenty five thousand dollars of their private coin, and at the present rate the amount will reach two hundred thousand before the first of January. The gentlemen of this firm, who have perhaps better facilities for judging than any other house, estimate the Pike's Peak gold yield for 1860 at five millions. The mode

of retorting the gold, and separating it from the quicksilver, as furnished by Mr. FREDERICK SHERMAN, an assayer on Nevada Gulch, is as follows :—

NEVADA CITY, October 25, 1860.

DEAR SIR :—Agreeably to your wish, I hereby communicate to you the usual mode of preparing our gold for the market.

The precious metal having been separated from the quartz by mercury, is held as it were in solution by this fluid metal; this solution is strained through buckskin. By this means the mercury is drained off, leaving the gold combined with a small portion of quicksilver. In this state it is denominated amalgam, and contains from one-sixth to one-third its weight of gold.

To drive off the remaining portion of mercury from the amalgam, it is put into an iron vessel having an air-tight cover. To this cover a tube is adjusted, one end of which can be placed in water. The retort, as the above vessel is called, is exposed to a light heat. The mercury is converted into vapor, which passes through the tube above mentioned, and is condensed by the water.

The gold being now nearly free from quicksilver, (I say nearly, for more or less will yet remain, depending upon the skill with which it has been retorted,) is denominated gold dust, or dust, and forms our circulating medium, very inconvenient, however, and subject to much loss, as the fine dust will penetrate the heaviest buckskin.

To obviate this difficulty, much of it is melted and cast into ingots, with the weight of the bar and the name of the assayer stamped thereon. Large quantities are granulated also. This is accomplished by pouring the melted metal into water; by this means it is formed into all shapes and sizes. The gold needs to be much purer for this latter process than for converting into bars; but in both cases the loss in weight, occasioned by the dissipation of the quicksilver, which I alluded to before as remaining in the dust after retorting, varies from 50 cents to \$2 per ounce.

The melted gold varies somewhat in value, depending on the amount of silver and other alloy contained in it. To ascertain its exact worth, an assay must be resorted to, performed as follows :—A small portion, say 500 milligrammes of the gold to be valued, is mixed with a small portion of pure lead, and enough silver is added to make the supposed weight of silver in the gold, plus the amount now added, equal to three times the weight of gold. This is now exposed to a white heat in a cupel, a small shaped vessel made of bone ashes; the gold, silver, and lead melt, the cupel absorbs the lead, which carries with it the copper and other base metals.

We have now nothing remaining but gold and silver combined in a small globule, or button as it is termed. This is rolled out quite thin, and subjected to the action of nitric acid. The object of adding the silver at the commencement of the assay will now be seen; had it not been done, the gold would have been present in such a large proportion as to envelop the silver already in it, and preserved it from the action of the acid. The silver being now removed, we have fine gold remaining. This is now weighed, and the proportion it bears to the weight first taken shows the per cent of fine gold under assay. This is the course pursued at the United States Mint, but being somewhat expensive, our gold is received by the merchants at the average price of \$16 per ounce for dust, and \$18 per ounce for melted gold.

FRED. SHERMAN.

LOUISIANA VALUATION.

The Auditor's report, published in January, 1860, shows the value of all property liable to taxation, in this State, to have been, in 1858, \$400,450,747, upon which was levied a tax, including licenses and polls, of \$1,426,329 33.

No report for the year 1859 was made. But little change has been made in the country parishes in the assessed value of property, while the increase in the city has been 30 per cent in the last two years.

The amount which will be paid into the State treasury by the parish of Orleans, for the year 1860, will not vary much from \$630,000, and allowing that there will be an increase in the country parishes of a few thousand dollars, shows that this city pays to the State, annually, about 43 per cent of its revenues. When this fact is considered, it proves the great injustice inflicted on the city, under the constitution, in the apportionment of the representation. Taxed to the amount of 43 per cent, our representation in both branches of the Legislature can never exceed 25 per cent of the whole representation.

We are indebted to Mr. JOHN A. WATKINS for the following highly important tabular statement, showing the State assessment for 1860 of the value of property in the parish of Orleans:—

STATE ASSESSMENT FOR THE YEAR 1860.

Dist.	Value of real estate.	No. of slaves.	Value of slaves.	Horses, cows, and carriages.	Stocks in vessels.	Capital and money at interest.	Licenses.	Polls.
1.	\$6,805,650	1,296	\$771,200	\$111,625	\$8,000	\$198,000	\$10,235	669
2.	8,482,150	1,808	1,082,950	174,975	10,000	542,800	26,775	2,064
3.	25,467,700	1,502	911,250	240,425	692,875	21,445,255	116,565	5,237
4.	11,204,050	962	590,250	116,700	4,000	4,599,800	29,230	969
5.	8,202,100	1,381	816,650	138,020	5,000	1,726,650	27,345	1,123
6.	5,115,300	1,222	724,390	55,250	....	329,050	14,085	697
7.	4,921,200	748	476,400	122,050	....	226,050	8,600	331
8.	2,366,050	253	164,400	55,850	313,000	297,150	8,595	384
9.	3,044,400	600	356,350	150,625	....	121,425	6,595	530
10.	8,379,525	1,551	840,900	133,250	4,000	221,550	12,690	1,203

\$84,448,125 11,316 \$6,785,240 \$1,298,770 1,036,675 \$29,712,730 \$260,715 13,259

Total value of property assessed..... \$123,271,040

There are discrepancies between this assessment for State purposes and the following for municipal account, arising from the fact that, by special legislation, some articles are taxed by the city which are exempt for State purposes, viz.: furniture pays a city but not a State tax, while bank capital pays no tax to either, except the free banks, which pay a State tax.

SOUTH CAROLINA DEBT AND FINANCES.

The official returns of the debt of South Carolina, September 30, 1860, is as follows:—

3 per cent stock outstanding Oct. 1st, 1860.....	\$44,078 63
6 per cent stock outstanding, Fire Loan, 1858.....	385,807 02
5 per cent bonds, Fire Loan, 1858.....	484,444 51
6 per cent bonds, Blue Ridge Railroad.....	1,310,000 00
6 per cent bonds, New Capitol.....	500,000 00
6 per cent stock, New Capitol, 1856.....	250,000 00
6 per cent stock, New Capitol, 1857.....	300,000 00
6 per cent stock, New Capitol, 1858, on 1st Oct., 1859..	\$369,920
Issued this year.....	30,080
6 per cent stock, New Capitol, 1859, issued this year.....	400,000 00
	372,210 00

\$4,046,540 16

The amount due for surplus revenue is not included in the items of the public debt proper, as the general government has repeatedly borrowed money since it was divided among the States, without demanding payment, there is no probability that the State will be required to refund it. The amount is \$1,051,422 09.

During the fiscal year the Bank of the State redeemed and canceled the following portions of the public debt:—

6 per cent stock, Fire Loan, 1838.....	\$342,524 55
8 per cent State Stock.....	15,199 89
5 per cent Southwestern Railroad Bank.....	500 00
	<hr/>
	\$358,228 94

In accordance with the provisions of the act for the relief of JACOB FRASTER, passed the 22d day of Dec., 1859, five bonds of the Spartanburg and Union Railroad Company, for five hundred dollars each, which were duplicates of the original lost bonds, numbered 94, 95, 96, 97, 98, were indorsed, after receiving a sufficient bond of indemnity, as required by said act.

SINKING FUND.

The report of the Treasurer of the Lower Division shows that there was in favor of the State on the 1st of October, 1860, the sum of \$1,889,093 35.

The Bank of the State passed to credit of sinking fund the balance of net profits for the fiscal year, amounting to \$85,637 89, after retaining four various advances to the State, \$95,595 37.

ILLINOIS STATE DEBT.

The following statement, showing that, from January, 1857, to November 30, 1860, the amount of State indebtedness, principal and interest, liquidated, besides paying the running interest semi annually, was \$2,959,746 80. The public debt of the State on the 30th of November last, was as follows:—

Interest Stock, payable at pleasure of the State.....	\$808,896 34	
New Refunded Stock—coupon bonds—payable after 1860.....	13,000 00	
New Refunded Stock, payable after 1862	902,000 00	
Liquidation Bonds, payable after 1865.....	\$250,890 21	
New Refunded Stock, payable after 1865.....	21,000 00	271,890 21
“ “ “ 1869.....		215,000 00
New Internal Improvement Stock, payable after 1870	2,163,617 83	
New Refunded Stock, payable after 1870.....	193,090 00	2,356,617 83
“ “ “ 1876.....		109,000 00
Interest Bonds of 1847, payable after 1877.....	1,534,925 82	
New Refunded Stock, payable after 1877.....	185,000 00	1,719,925 82
		<hr/>
		\$6,395,830 20
Old State Bonds—		
Bank of Illinois Bonds, 1860.....	\$31,000	
Internal Improvement Bonds, 1870.....	42,000	
Illinois and Michigan Canal Bonds, 1860.....	4,000	77,000 00
122 Macalister and Stebbins' Bonds, which, according to statements, etc., of Macalister, will, January 1st, 1861, amount to		49,608 81
Internal Improvement Scrip.....		23,054 85
Six certificates for arrears of interest.....		2,674 53
		<hr/>
		\$6,548,167 89
Canal Debt—		
Illinois and Michigan Canal Bonds, registered.....	\$2,299,095	
Illinois and Michigan Canal Bonds, unregistered.....	1,373,090	
	<hr/>	
	\$3,672,185	
From the Canal Debt is to be deducted a dividend of five per cent on the registered bonds, which will leave total Canal Debt.....		3,557,230 25

ASSESSED VALUATION OF THE CITY AND COUNTY OF ALBANY.

The following is the majority report adopted by the Board of Supervisors of Albany County.

CITY OF ALBANY.

	Real.	Personal.	Total.
1st ward.....	\$1,048,206	\$7,000	\$1,055,206
2d ward.....	1,188,200	29,800	1,218,000
3d ward.....	1,616,412	110,460	1,726,862
4th ward.....	3,253,991	869,825	4,123,816
5th ward.....	3,772,158	4,506,003	8,278,161
6th ward.....	2,165,573	263,181	2,428,754
7th ward.....	1,279,495	59,131	1,338,626
8th ward.....	1,264,630	16,000	1,280,630
9th ward, east.....	1,890,630	120,363	2,010,993
9th ward, west.....	57,885	.....	57,885
10th ward, east.....	2,678,115	25,050	2,703,165
10th ward, west.....	93,150	.....	93,150
Total.....	\$20,308,445	\$6,006,803	\$26,310,248

TOWNS.

Berne	383,103	85,362	468,465
Bethlehem	1,876,085	139,028	2,015,113
Coeymans	1,019,975	192,324	1,212,299
Guiderland	728,962	84,091	813,053
Knox.....	269,961	72,554	342,515
New Scotland.....	1,075,120	113,360	1,189,480
Rensselaerville... ..	614,560	156,502	771,062
Westerlo	571,925	116,027	687,952
Watervliet	2,093,519	356,950	2,450,469
“ villages	2,665,957	397,000	3,282,963
Total.....	\$11,319,167	\$1,913,194	\$13,232,361

DEBT OF PENNSYLVANIA.

We are indebted to the Auditor-General for the following statement of the public debt of Pennsylvania:—

STATEMENT SHOWING THE INDEBTEDNESS OF THE COMMONWEALTH OF PENNSYLVANIA ON THE 1ST DAY OF DECEMBER, 1860.

Funded debt, viz:—

6 per cent loans.....	\$400,630 00	
5 per cent loans.....	36,967,295 72	
4½ per cent loans.....	381,200 00	
4 per cent loans.....	100,000 00	
		\$37,849,125 72

Unfunded debt, viz:—

Relief notes in circulation.....	\$99,402 00	
Interest certificates outstanding	16,074 30	
Interest certificates unclaimed	41,448 38	
Domestic creditor's certificates	797 10	
		\$120,721 78

Total State debt, December 1st, 1860.....		\$37,969,847 50
Amount of public debt on Dec. 1, 1859.....	\$38,638,961 07	
Deduct amount paid during the fiscal year ending with 30th November, 1860, viz:—		
Loans redeemed.....	\$664,857 65	
Relief notes canceled.....	1,811 00	
Interest certificates.....	2,439 52	
Domestic creditor's certificates.....	5 40	
		669,113 57
		\$37,969,847 50

ILLINOIS TWO MILL TAX.

The following is a statement of the receipts into the treasury on account of the two mill tax, levied under the State constitution, for the payment of the State debt :—

Up to and including November 30, 1850.....	\$165,738 31
During fiscal term ending November 30, 1852.....	492,166 53
“ “ “ 1854.....	701,220 99
“ “ “ 1856.....	1,118,413 14
“ “ “ 1858.....	1,387,217 71
From December 1, 1858, to July 31, 1860	944,754 30
Total receipts to July 31, 1860.....	\$4,804,561 57

ESMERALDA ASSAYS.

Mr. A. H. MITCHELL, says a California paper, has shown to the editor of the *Delta* about 250 pounds of silver ore brought from the Esmeralda country. Specimens from the following leads have assayed as follows to the ton :—

Aurora.....	\$5,640
Last Chance	4,000
Silver Hill.....	2,440
Garibaldi.....	2,100
Sonora.....	1,900
Last Rose of Summer.....	4,000
Esmeralda.....	1,700
Mayfield	1,900
Bear Flag, (gold)	6,000

Mr. MITCHELL vouches for the correctness of the above statement, as the tests have all been made by competent assayers.

STATE BANK OF IOWA.

The statement of the State Bank of Iowa, made officially, shows its condition as follows :—

Specie in the bank.....	\$416,339 80
Bank notes on hand	439,460 00
Due from other banks	297,716 88
Discounts	1,164,565 72
Capital of the bank	416,339 87
Circulation.....	880,308 00
Due other banks.....	24,478 92
Deposits.....	966,300 52

The most noticeable feature in this statement is the amount of circulation \$880,308.

ILLINOIS BANKS.

By the creation of new banks and extending the circulation of some of the old ones, the bank note circulation of the Illinois banks was expanded from \$9,610,000 on the 1st of July last to \$11,010,000 October 1, being an addition of \$1,400,000, or more than fourteen per cent. The State stocks deposited as security for the redemption of the circulation July 1st, was \$10,678,000, or 11 per cent above the circulation, which would show that the stocks deposited against the circulation October 1st, amounted to \$12,264,000. The circulation being then \$11,010,000, the stocks were nearly 13 per cent above the circulation, showing the average at which the stocks were taken to be 87 per cent.

STATISTICS OF TRADE AND COMMERCE.

THE WHALE FISHERY IN 1860.

The *Whalemen's Shipping List*, of New Bedford, has compiled its usual annual statement of the whale fishery of the United States for the past year, from which we extract a few facts that will interest our readers. The year opened with no very flattering prospects, and its success has only been about up to the moderate anticipations which were entertained.

The whole number of vessels employed in the American whale fishery on the first of January, 1861, is 514, against 569 on the first of January, 1860, showing a diminution of 55 vessels, and an aggregate of 18,803 tons.

The average prices during the past year have been, for sperm oil 141½ cents, whale oil 49½ cents per gallon; whalebone, Northern, 80 1-5th cents, and South Sea, 73½ cents per pound.

The exports of oil and bone for the year have been as follows:—Sperm oil, 32,792 bbls.; whale oil, 13,007 bbls.; and of whalebone, 911,226 lbs., showing a falling off in the export of sperm, from 1859, 19,415 bbls., and in whalebone, 796,703 lbs., and an excess in whale oil of 4,828 bbls.

The news from the Northern Whaling Fleet the last season is very discouraging. During the season of 1860, about 140 American ships cruised North, including Kodiak, Arctic, Ochotsk Seas. From the information received it does not appear that their average catch will reach 600 bbls.—the lowest average since the whaling business was pursued in these seas, according to the number of ships.

Six ships have been fitted from New Bedford the last year for Davis' Straits—three from New Bedford and three from Fair Haven—whose success remains to be proved.

Of the Northern fleet only two ships have been lost—the *George and Mary*, of New London, wrecked in Ochotsk Sea, June 7th, and the *Paulina*, of New Bedford, lost in a gale of wind off Lahaina, November 15. The imports of sperm oil for the present year will come fully up to that of the past year, while whale must fall short.

The number of vessels employed in the right whaling business will be considerably diminished this year. Many of the largest will be withdrawn and put into the freighting business, while others, which need heavy repairs, will be sold and broken up.

We annex a comparison of the imports:—

	Sperm.	Whale.	Whalebone.		Sperm.	Whale.	Whalebone.
1860 bbla.	73,708	140,005	1,337,650	1854 bbla.	76,696	319,837	3,545,200
1859.....	91,408	190,411	1,923,850	1853.....	103,077	260,114	5,652,300
1858.....	81,941	182,223	1,540,600	1852.....	78,372	84,311	1,259,900
1857.....	78,440	230,941	2,058,900	1851.....	99,591	328,483	3,966,500
1856.....	80,941	197,890	2,592,700	1850.....	92,892	200,608	2,869,200
1855.....	72,649	184,015	2,707,500				

The imports of sperm and whale oil and whalebone, for 1860, it will be seen from the above table, fall considerably below those of 1859.

The average prices of sperm and whale oil for the past year are better than

for 1859. We annex a comparison of the average prices of sperm oil, whale, and whalebone for the past twenty years.

	Sperm.	Whale.	Bone.		Sperm.	Whale.	Bone.
1860.cts.	141½	49½	80 1-10	1850.cts.	120 7-10	49 1-10	34 4-10
1859....	136½	48½	.....	1849....	108 9-10	39 9-10	31 8-10
1858....	121	54	92½	1848....	100½	36	36½
1857....	128½	73½	96½	1847....	87½	33½	34
1856....	162	79½	58	1846....	88	32½	33½
1855....	177 2-10	71 2-10	45½	1845....	90½	36½	40
1854....	148½	58½	39.1	1844....	68	34½	35½
1853....	124½	58½	34½	1843....	73	33½	23
1852....	123½	68 1-6	50½	1842....	94	31½	19 2-10
1851....	127½	45 5-16	34½	1841....	100	30½	19

FREMONT TRADE.

The *Fremont Journal* has a very interesting exhibit of some matters of trade at that point for the last year. They very clearly show Fremont to be a place of increasing business importance, and promise well for the future. We condense from the *Journal* the following items:—The total quantity of grain received during the season was 671,533 bushels, made up of wheat, 422,405; corn, 227,758; and oats, 21,371. The shipments were—wheat, 397,838; corn, 225,730; oats, 18,287. There was received 1,752 tons of merchandise, 4,011 barrels of salt, and 500 barrels of water lime. The *Journal* complains of the existence of two bars in the Sandusky River, which very materially obstruct navigation, and which it thinks could be removed by an expenditure of \$7,000 to \$8,000. One firm has paid the present season for lighterage \$3,000.

The total arrivals and departures for the season were 194, besides the constant trips of the "Bonnie Boat," and the frequent ones of the "North Star" and the "Swan."

In lumber, the figures exhibit the following gross amounts:—Pine lumber, 1,886,000 feet; shingles, 1,908,500; ash and poplar, 298,364 feet; black walnut, 775,000 feet; lath, 1,184,000; staves, 250,000; oak, 120,000 feet, and 5,000 cedar posts; besides 350,000 feet of black walnut lumber, shipped by S. A. BEMENT, of Fostoria, from Fremont.

TRADE OF NORFOLK.

The enterprising merchants of Norfolk, (who have long since learned to appreciate the great advantages of a mercantile organization, as maintained in every city of any note, except Richmond,) have recently put forth in pamphlet form the "Third Annual Report of the Merchants' and Mechanics' Exchange" of that city. This report presents information relative to the position of Norfolk as a port and a commercial center, worthy of note by those who take an interest in watching the progress of commercial cities. Norfolk has but little claim as yet to a manufacturing reputation, though her citizens maintain that the position of the city is highly favorable to such enterprises. The report observes, on this point, "cotton and grain may be brought here from points in the cotton and grain growing districts of the South, distant a thousand miles and more, without transshipment; iron, and lead, and copper ore, or in pigs and blooms, from the inexhaustible mines of Southwest Virginia and East Tennessee, may be landed at our doors without breaking bulk; all the wealth of the

soil, and the riches that lie buried in the earth, of a vast section of unequaled fertility, may be emptied upon our harbor without any other handling than is necessary to put it on the car at its distant point of shipment, and to take it off when it reaches our port. * * * *

A still stronger inducement is the fact that manufacturers here may acquire a monopoly of the business of a large portion of North and South Carolina, Virginia, and Tennessee, in their products." The truth of all this is not to be denied; but it is always to be remembered in cases of this nature that a city must not only possess good natural advantages for the prosecution of a certain enterprise, but that the advantages must be superior to those of competing cities

The following statement shows what are the principal manufactures now carried on in Norfolk, and the value of their products, as estimated by "an experienced gentleman" for the report:—Agricultural implements, \$100,000; shoos and coopers' stuff, \$150,000; carriages and harness, \$40,000; tin and copper ware, \$36,000; cigars, \$75,000; iron and machinery, \$70,000; cordage, twine, and oakum, \$30,000; soap and candles, \$54,000; rosin, oil, &c., \$12,000; cabinet ware, &c., \$75,000; flour and meal, \$110,000; total estimated value of manufactures, \$752,000. As a center for trade in produce, Norfolk holds a more important position. The receipts of produce of all kinds during the last fiscal year ending June 30th, amounted to upwards of \$4,000,000, being distributed among the following articles:—

	Quantity.	Value.
Corn.....bush.	1,710,298	\$1,282,720
Cotton.....bales	83,198	1,500,000
Beans and peas.....bush.	45,487	45,780
Shingles.....No.	54,324,132	79,150
Staves.....	8,404,960	368,950
Flour.....bbls.	55,568	338,028
Wheat.....bush.	81,720	106,236
Fish.....bbls.	15,460	80,000
Tar, &c.....	41,963	86,500
Oats.....bush.	47,360	19,000
Dried apples.....	48,952	58,000
Apple brandy.....bbls.	1,560	52,000
Flaxseed.....bush.	3,709	5,000
Dried peaches.....	10,408	54,000
Peanuts.....	100,000	90,000
Turpentine.....bbls.	1,057	5,000
Railroad cross ties.....No.	105,790	45,000
Hoops.....	22,000	44,000
Total value.....		\$4,173,854

BRIGHTON CATTLE MARKET FOR 1860.

	No.	Value.
Beef cattle.....	67,985	\$3,128,310
Stores.....	14,285	493,695
Sheep.....	226,790	703,049
Shoats.....	51,800	261,550
Fat hogs.....	20,115	221,265
Total value.....		\$4,807,869
" 1859.....		4,803,666
" 1858.....		4,962,152

TRADE OF HAMILTON.

The subjoined abstract of the customs returns at this port, for the year ending December 31st, 1860, shows a gratifying increase in the trade of this city. But it is more particularly gratifying, as showing the immense increase in our export trade, that increase being nearly double the trade of the previous year. The following statement shows the value of goods entered for consumption with the amount of duty collected thereon, for the year ending December 31, 1860 :—

	Value.	Duty.
Dutiable goods.....	\$2,111,118	\$418,149 08
Free goods.....	265,691	.....
Total, 31st December, 1860	\$2,376,804	\$418,149 08
Total, 31st December, 1859	2,228,501	349,445 95
Increase, 1860.....	\$148,303	\$68,703 13

The following statement shows the value of exports for the year 1860 :—

Produce of the mine.....	\$11,492
Produce of the fisheries	90
Produce of the forest.....	283,240
Animals and their products.....	4,505
Agricultural products.....	1,103,787
Manufactures.....	684
Other articles.....	200
Total, 1860.....	\$1,358,948
Total, 1859.....	688,523
Increase, 1860.....	\$665,425

STOCK AND SHIPMENTS OF FLOUR AND WHEAT.

The season of canal navigation being now about closed, when no further receipts of wheat and flour can be expected, and in view of the present condition of our own and other markets, and the probable wants for the coming six or seven months, for a supply of breadstuffs, we have deemed it advisable to prepare a statement from the most authentic and reliable sources, of the stock of wheat and flour now on hand in this city, thereby showing what may be relied upon for our own consumption, (which is estimated at from 55,000 to 65,000 barrels per week,) and for shipment :—

Stock of flour at this port.....	barrels	760,388
Stock of wheat at this port.....	bushels	3,558,749
	Flour, barrels.	Wheat, bushels.
Export from New York to Great Britain and the continent, from September 1 to November 16, 1860...	478,586	6,420,367
To Liverpool.....	27,307	340,486
London.....	20,747	171,187
Glasgow.....	2,869	22,638
Falmouth	1,000	19,860
Other ports	555	.....
Cork.....	...	12,588
Dublin .....	...	17,260
Galway.....	...	16,781
Total	530,564	7,021,142
To the continent, September 1 to November 20, 1860.	16,273	165,923

UNITED STATES IMPORTATIONS.

We annex a summary of the leading articles imported during the last fiscal year, compared with the two previous years :—

	1868. Value.	1869. Value.	1860. Value.
Woolens	\$26,288,189	\$33,301,509	\$37,735,914
Cottons	17,574,142	26,026,140	9,079,676
Hempen goods.....	594,323	432,746	726,916
Iron, and manufactures.....	14,453,617	14,749,056	18,464,346
Sugar.....	18,946,668	28,345,297	28,931,166
Hemp, unmanufactured.....	249,417	381,581	308,563
Salt.....	1,102,202	1,278,098	1,481,140
Coal.....	769,926	931,730	839,334
Total.....	\$79,978,479	\$105,441,157	\$97,517,055

The duties levied on these eight articles were \$26,000,000, in 1859-60, viz. :

	Duties.	Duties.	Duties.
Woolens	\$5,550,025	\$7,195,936	\$8,155,518
Cottons	3,873,350	5,677,083	6,120,056
Hempen goods.....	89,148	60,134	115,370
Iron, and manufactures.....	3,407,818	3,516,378	4,895,784
Sugar	4,547,199	6,802,871	6,943,479
Hemp	59,860	91,579	74,055
Salt.....	165,330	190,964	214,671
Coal.....	184,782	228,615	201,440
Total.....	\$17,877,514	\$23,759,062	\$26,120,375

TRADE OF DETROIT.

The Detroit *Tribune* publishes a carefully prepared statement of the trade and commerce of that city for the past year, from which we extract the following table of the leading imports and exports :—

	Imports.	Exports.		Imports.	Exports.
Flour....bbls.	842,175	803,513	Cattle	61,810	3,372
Wheat...bush.	1,694,951	1,607,757	Pork....bbls.	51,421	49,400
Corn.....	565,343	592,044	Beef.....	18,998	22,931
Rye.....	19,128	10,699	Beef.....tcs.	3,272	3,361
Barley	110,199	2,726	Whisky & Al-		
Oats	179,598	309,205	cohol...bbls.	22,315	18,336
Wool.....lbs.	4,545,505	4,468,711	Staves....No.	3,674,928	4,182,100
Live hogs....	61,289	48,259	Lumber....ft.	13,256,752	44,584,000

IMPORTS OF MONTREAL.

The customs returns for the month of December are made up, and they show the following result for the year 1860. Whilst there is a very trifling addition to the value of goods imported, say \$205,176, there is an increase in the duty of \$117,044. Free goods have largely fallen off in amount :—

IMPORTS AT THE PORT OF MONTREAL FOR THE YEARS 1859 AND 1860.

	1859.	1860.
Goods paying duty	\$12,173,871	\$12,469,047
Free goods.....	3,516,469	3,020,092
Total imports	\$15,690,340	\$15,489,139
Duty	2,335,242	2,452,286

EASTERN SHOES IN PHILADELPHIA.

We have prepared a yearly statement of the receipts at Philadelphia of Eastern made boots and shoes, which will be found convenient for reference :—

RECEIPTS OF BOOTS AND SHOES AT PHILADELPHIA FOR THE YEAR 1860.

	Rail.	Water.	Total.
January.....	267	2,998	3,265
February.....	387	8,975	9,362
March.....	1,786	5,270	7,056
April.....	1,393	1,833	3,226
May.....	738	1,285	2,023
June.....	236	851	1,087
July.....	95	5,542	5,637
August.....	671	10,425	11,096
September.....	796	4,472	5,268
October.....	1,654	3,162	4,806
November.....	1,101	3,736	4,837
December.....	255	854	1,109
Total.....	9,377	49,398	58,770

NUMBER OF PASSENGERS BY EACH LINE OF STEAMERS.

The following table shows at once the number of passengers brought to and carried from this country by each line of steamers, during the past year :—

	Eastward.	Westward.	Total.
Cunard line.....	1,622	2,714	4,336
Cunard line (Boston branch).....	1,463	1,859	3,322
Liverpool and New York screw line.....	8,241	18,848	27,089
Southampton and Havre (Vanderbilt).....	2,145	2,803	4,948
Havre line (Fulton and Arago).....	1,642	2,123	3,765
Havre line (Adriatic and Atlantic).....	1,370	1,196	2,566
Glasgow line.....	100	201	301
Hamburg line.....	3,009	8,183	11,192
Bremen line.....	1,495	3,948	5,443
Galway line.....	1,621	4,244	5,865
Galway line to Boston (one trip New York)....	290	1,099	1,389
Liverpool and Portland line.....	1,146	1,936	3,082
Cunard's freight steamers (estimated).....	400	600	1,000
Great Eastern (one trip).....	100	42	142
Total in 1860.....	24,644	49,796	74,440
Total in 1859.....	24,865	36,145	61,010
Increase in 1860 over 1859.....			13,430

UNITED STATES CONSUMPTION OF SUGAR.

From the elaborate annual tables contained in the *New York Shipping and Commercial List* we extract the following figures, showing the consumption of home and imported cane sugar in the United States for many years, in tons of 2,240 lbs. :—

CONSUMPTION OF FOREIGN AND DOMESTIC CANE SUGAR FOR THE YEAR ENDING DEC. 31.

Year.	Foreign.	Domestic.	Total.	Year.	Foreign.	Domestic.	Total.
1860...tons	296,950	118,331	415,281	1855...tons	192,604	185,148	377,752
1859.....	239,034	192,150	431,184	1854.....	150,854	234,444	385,298
1858.....	244,758	143,634	388,492	1853.....	200,610	172,379	372,989
1857.....	241,761	39,000	280,765	1852.....	196,558	118,659	315,217
1856.....	255,292	123,468	378,760	1851.....	181,049	107,438	288,485

Taking the population of 1851 at 24,000,000 in round number, and that of 1860 at 32,000,000 of people, it follows that the consumption per head at the former period was 27 lbs., and in 1860, 29 lbs. The value of the 27 lbs. in 1851, was \$1 22; of the 29 lbs. in 1860, \$2 03. Thus the quantity increased 8 per cent, while the value increased nearly 70 per cent.

SHIPPING OF GLOUCESTER.

The Gloucester *Telegraph* publishes a list of all the vessels above twenty tons belonging to the district of Gloucester on the 1st day of August, of the present year. There are on the list the names of 486 vessels, comprising 2 barks, 4 brigs, 456 schooners, 23 sloops, and 1 steamboat. The barks and brigs, and 5 of the schooners are registered, the remainder are enrolled. The registered tonnage is 2,161 40; the enrolled, 34,932 31—total, 37,093 71. This, it should be recollected, does not include the boats, and consequently is not the whole tonnage of the district. The barks, brigs, steamboat, and 364 of the schooners, amounting to 30,164 19 tons, hail from Gloucester harbor; 37 schooners and 1 sloop, 2,046 24 tons, from Annisquam; 51 schooners and 21 sloops, 4,601 34 tons, from Rockport; 3 schooners and 1 sloop, 207 53 tons, from Manchester; and 1 schooner, 74 36 tons, from Essex.

The number of men and boys employed on board the fishing fleet from Gloucester harbor this season, is 3,958, being 390 more than were employed last season.

EXPORTS OF FLOUR AND GRAIN FROM LAKE MICHIGAN.

The following table shows the total shipments of flour and grain from Lake Michigan ports during the year 1860:—

EXPORTS OF FLOUR AND GRAIN FROM LAKE MICHIGAN IN 1860.

	Flour.	Wheat.	Corn.
Chicago.....bush.	718,889	12,487,684	18,943,172
Milwaukee*	285,712	8,161,982	114,444
St. Joseph.....	.....	25,000	.....
Waukegan.....	.....	170,000	.....
Kenosha.....	4,160	279,208	.....
Racine.....	10,871	852,951	.....
Port Washington.....	6,765	31,410	.....
Sheboygan.....	27,222	78,752	.....
Manitowoc.....	5,000	80,000	.....
Green Bay.....	86,187	109,941	.....
Total.....	1,088,146	22,227,928	14,057,616

CALORIC ENGINES IN SPAIN AND GERMANY.

Orders have been received in New York for nine 32-inch and 24-inch caloric engines to go to Spain. A manufactory of these engines on a large scale has been established at Bockan, near Magdeburg, by the Hamburg-Magdeburg Engine Company, and placed under the charge of a machinist who was sent to America on purpose to study their construction.

* The figures for Milwaukee are the receipts of grain and flour.

JOURNAL OF INSURANCE.

RATES OF INSURANCE.

Atlantic ports, to or from ports in Europe, not in the Northern Sea. . . .	1	a	2
“ “ “ “ “ in the Northern Sea.	2	a	3
Africa, to or from, general liberty.	2	a	2½
“ out and home.	4	a	5
Apalachicola, to and from.	1½	a	2
Bermuda, to or from.	1	a	.
Brazils, to any Atlantic port of United States.	1½	a	1½
Buenos Ayres, direct. . . . .	.	a	2
Montevideo. . . . .	.	a	1½
Bahamas, to or from.	1½	a	2
Batavia, or any port in the Indian Ocean.	2	a	2½
“ out and home.	4	a	6
Cuba, any one port.	1½	a	2½
Calcutta, out.	3	a	3½
“ out and home. . . . .	.	a	6
Cadiz.	1½	a	2
Charleston, Savannah, and Darien, to or from.	½	a	1
Denmark.	2	a	3
Demerara, out or home.	1½	a	.
Great Britain or Ireland, to any port, out or home.	1	a	2½
“ “ “ “ “ and back the United States.	2	a	4
Dry goods, home.	2½	a	2
Hardware, home.	2½	a	2½
Gibraltar.	1½	a	2
Halifax, to or from.	1	a	2
Havre, to or from.	1	a	1½
“ out and home.	2½	a	.
Honduras, to or from.	2	a	2½
Laguayra.	1½	a	.
Lisbon, to or from.	1½	a	2
Madeira, Western or Cape de Verde Islands.	2	a	.
“ “ “ “ “ out and home.	4	a	.
Malaga.	1½	a	2
Trieste.	2	a	2½
“ and back to the United States.	4	a	4½
Manilla, out and home.	5	a	.
Mobile.	1½	a	2
New Orleans.	1½	a	2
From either Mobile or New Orleans.	1½	a	1½
New Orleans or Mobile, to ports in Europe not in the North Sea.	1½	a	1½
Ocracoke Bar (over).	1½	a	1½
Porto Cabello.	1½	a	.
Rio Janeiro or Pernambuco.	1½	a	1½
Russia, different seasons.	1½	a	6
St. Domingo, out or home.	2	a	2½
Smyrna or Constantinople.	2	a	2½
Spanish Main, any one port, or between the Orinoco and the Sabine.	1½	a	3
“ “ “ “ “ out and home.	3	a	6
Specie, by steamers, from San Francisco, via Aspinwall or Nicaragua.	1½	a	.
Sumatra, port or ports, to or from.	2	a	.
St. Croix and St. Thomas, to or from.	1½	a	1½
Sweden.	2	a	2½
Turk's Island and back.	4	a	5
Valparaiso, out or home.	2	a	2½
“ out and home.	4	a	5
Vera Cruz, Tampico, etc.	2	a	3½

Wilmington, N. C., to or from	1	a	1½
To the coast of Patagonia, per annum.....	6	a	10
To the Pacific, voyage round.....	4	a	6
Windward Islands, to a port not British.....	1½	a	2
“ “ out and home.....	3	a	.
California.	8	a	4
Oregon.....	4½	a	5

COASTWISE RISKS.

To or from any port in Maine or New Hampshire.....	½	a	1
“ “ Massachusetts.....	½	a	½
“ “ Rhode Island and Connecticut	½	a	½
“ “ Chesapeake Bay.....	½	a	½

VESSELS ON TIME—LIBERTY OF THE GLOBE.

Of \$30,000 value and upwards	7	a	8
1,500 tons and under.....	8	a	9
1,500 tons and not over 2,000.....	8	a	10
Of \$20,000 value and upwards.....	7	a	8
15,000 “ “	9	a	10
10,000 “ “	10	a	..
5,000 “ “	12	a	15
3,000 “ “	15	a	20

In all cases in which the above rates are charged, the *grain* clause is inserted, and Texas, Mexico, and Yucatan are excepted.

LIVES LOST BY FIRE DURING 1860.

The table annexed exhibits the number of lives which have been lost each month during the year just closed in the United States, in buildings which were destroyed by fire, compared with the number of unfortunates by similar catastrophes during 1859:—

	1860.		1859.	
	Fires.	Lives lost.	Fires.	Lives lost.
January.....	7	13	10	16
February.....	9	29	4	9
March.....	14	36	4	7
April.....	7	20	4	10
May.....	5	7	7	22
June.....	1	1	2	3
July.....	4	11	1	1
August.....	4	8	2	4
September.....	6	28	4	8
October.....	5	6	4	8
November.....	7	10	4	9
December.....	6	17	5	15
Total.....	75	186	51	122

The above table does not include the victims of the terrible accident at Lawrence, Mass., which occurred on the 10th of January.

During the past seven years the number of lives lost in burning buildings in the United States is exhibited in the following table:—

Years.	Fires.	Lives lost.	Years.	Fires.	Lives lost.
1854.....	83	171	1859.....	51	112
1855.....	62	119	1860.....	75	186
1856.....	89	183			
1857.....	72	158			
1858.....	58	152			
			Total in seven years.	490	1,081

COMMERCIAL REGULATIONS.

LIST OF TARES ALLOWED BY LAW AND CUSTOM.

	By law. Per cent.	By custom.
Almonds.....cases	..	8 per cent.
Almonds.....casks	..	15 per cent.
Almonds.....double bales	..	8 lbs. each.
Almonds.....bales	..	4 lbs. each.
Almonds.....frails	..	10 per cent.
Almonds.....ceroons	..	10 per cent.
Almonds.....bags	..	4 per cent.
Alum.....	..	5 lbs. each.
Alum.....casks	..	10 per cent.
Anvils.....	..	90 lbs. each.
Bristles.....	..	10 per cent.
Butter, weighing 80 to 100 pounds.....kegs	..	18 lbs. each.
Black plate.....boxes	..	8 lbs. each.
Candles.....	8	..
Candy, sugar.....	10	..
Cheese.....hampers	10	..
Cheese.....bskts.	10	..
Cheese.....boxes	20	..
Cheese.....casks or tubs	..	15 per cent.
Cassia.....boxes	..	actual.
Cassia.....mats	..	{ 9 per cent or 1½ lbs. for four mats.
Chocolate.....boxes	10	..
Coffee.....bags	1	..
Coffee.....bales	3	..
Coffee.....casks	12	..
Coffee.....ceroons	..	6 per cent.
Coffee.....boxes	..	15 per cent.
Cinnamon.....	..	actual.
Cinnamon.....bales	..	6 per cent.
Cocoa.....bags	1	..
Cocoa.....casks	10	..
Cocoa.....ceroons	..	8 per cent.
Cocoa.....bskts.	..	2 lbs. each.
Cloves.....casks	..	12 lbs. each.
Cloves.....bags	..	4 lbs. each.
Cotton.....bales	2	..
Cotton.....ceroons	6	..
Composition spikes or nails.....casks	8	..
Copper.....	8	..
Copperas.....	..	10 per cent.
Corks.....small bales	..	5 lbs. each.
Corks.....large bales	..	8 lbs. each.
Corks.....double bales	..	16 lbs. each.
Cordage, twine.....boxes	..	15 per cent.
Cordage, twine.....casks	12	..
Cordage, twine.....bales	3	..
Currants.....casks	..	12 per cent.
Currants.....boxes	..	10 per cent.
Figs.....	..	10 per cent.
Figs.....mats	..	4 per cent.
Figs.....frails	..	4 per cent.
Figs.....drums	..	8 per cent.
Figs.....casks	..	12 per cent.

	By law. Per cent.	By custom.
Fish, dry . . . . .	..	12 per cent.
Fish, dry boxes	..	12 per cent.
Flax bobbins	..	8 to 3½ lbs. each.
Gunpowder casks	..	23 lbs. each.
Gunpowder ¼ casks	..	9 lbs. each.
Gunpowder ½ casks	..	5 lbs. each.
Glue boxes	..	15 per cent.
Glue casks	..	20 per cent.
Glue, from Canton boxes	..	11 per cent.
Hemp, Manilla bales	..	6 lbs. each.
Hemp, Hamburg, Leghorn, Trieste . . . . .	..	7½ lbs. each.
Indigo cases	..	15 per cent.
Indigo bbla.	12	..
Indigo other casks	15	..
Indigo cerroons	10	..
Indigo bags	8	..
Indigo mats	8	..
Iron, sheet boxes	..	8 per cent.
Iron, hoop . . . . .	..	8 per cent.
Iron, Russia, sheet packs	..	14 to 28 lbs. each.
Jalap yellow mats	..	12 lbs. each.
Lead, pigs, bars, sheets casks	..	3 per cent.
Lead, white, in oil kegs	..	8 per cent.
Lead, white, in oil hhds.	..	100 lbs. each.
Lead, white, dry casks	..	6 per cent.
Lead, red, dry . . . . .	..	6 per cent.
Lead, red, in oil . . . . .	..	10 per cent.
Lead shot . . . . .	..	3 per cent.
Nails	8	..
Nails bags	..	8 per cent.
Ochre, dry casks	..	10 per cent.
Ochre, in oil . . . . .	..	12 per cent.
Paris white . . . . .	..	10 per cent.
Pepper	12	..
Pepper bales	5	..
Pepper bags	2	..
Pepper double bags	..	4 lbs. each.
Pimento casks	16	..
Pimento bags	8	..
Plums boxes	..	8 per cent.
Plums casks	..	12 per cent.
Prunes boxes	..	8 per cent.
Paper bales	..	5, 6, 7, & 8 lbs. each.
Raisins jars	..	18 lbs. each.
Raisins boxes	..	15 per cent.
Raisins casks	..	12 per cent.
Raisins frails	..	4 per cent.
Raisins drums	..	10 per cent.
Rice casks	..	10 per cent.
Salts, Glauber	8	..
Salts, Epsom . . . . .	..	11 per cent.
Segars boxes	18	..
Segars casks	18	..
Shot	8	..
Snuff . . . . .	..	12 per cent.
Snuff boxes	..	15 per cent.
Soap	10	..
Soap, brown, dry casks	..	12 per cent.
Soap, brown, in oil . . . . .	..	12 per cent.
Spikes . . . . .	..	8 per cent.
Spikes bags	..	8 per cent.

	By law. Per cent.	By custom.
Steel .....casks	..	8 per cent.
Steel .....cases	..	8 per cent.
Steel .....bdls.	..	8 per cent.
Steel from Trieste, in large size.....boxes	..	11 lbs. each.
Steel from Trieste, in second size.....	..	10½ lbs. each.
Sheet iron .....cask	..	15 per cent.
Sugar, candy .....boxes	10	..
Sugar, candy .....tubs	..	15 per cent.
Sugar .....bags	5	..
Sugar.....boxes	15	..
Sugar.....casks	12	..
Sugar.....mats	5	..
Sugar.....ceroons	..	8 per cent.
Sugar.....canisters	..	40 lbs. each.
Starch, from Bremen, weigh 62 lbs. each ..bxs.	..	18 lbs. each.
Tallow .....bales	..	8 per cent.
Tallow .....casks	..	12 per cent.
Tallow .....ceroons	..	8 per cent.
Tallow .....tubs	..	15 per cent.
Tea, Bohea..... chests	..	22 lbs. each.
Tea, green, (70 lbs. and over).....boxes	20 lbs. each.	..
Tea, other, (between 50 and 70 lbs.)	18 lbs. each.	..
Tea, other, (of 80 lbs.).....	20 lbs. each.	..
Tea, other, (over 80 lbs.).....	22 lbs. each.	..
Tobacco, leaf.....bales	..	8 lbs. each.
Tobacco, leaf, with extra cover.....	..	10 lbs. each.
Tobacco, leaf .....boxes	..	15 per cent.
Twine .....casks	12	..
Twine .....boxes	..	15 per cent.
Twine .....bales	3	..
Whiting.....casks	..	10 per cent.
Wire.....	..	8 per cent.
Wool.....bales	..	8 per cent.

**RATES OF COMMISSIONS RECOMMENDED BY THE CHAMBER OF COMMERCE TO BE CHARGED
WHERE NO EXPRESS AGREEMENT TO THE CONTRARY EXISTS.**

BANKING.

	Per cent.
On purchase of stocks, bonds, and all kinds of securities, including the drawing of bills for payment of same.....	1
On sale of stocks, bonds, and all kinds of securities, including remittances in bills and guaranty.....	1
On purchase or sale of specie and bullion.....	½
Remittances in bills of exchange.....	½
Remittances in bills of exchange, with guaranty.....	1
Drawing or indorsing bills of exchange.....	1
Collecting dividends on stocks, bonds, or other securities.....	½
Collecting interest on bonds and mortgages.....	1
Receiving and paying moneys on which no other commission is received....	½
Procuring acceptances of bills of exchange payable in foreign countries.....	½
On issuing letters of credit to travelers, exclusive of foreign bankers' charge	1
Where bills of exchange are remitted for collection, and returned under protest for non acceptance or non-payment, the same commissions are to be charged as though they were duly accepted and paid.	

GENERAL BUSINESS.

On sales of sugar, coffee, tea, and general merchandise, usually sold in large quantities, and on credit under six months, or for cash	5
On sales of manufactured goods, and other articles usually sold on long credits, for commissions and guaranty	7½
do., for cash	5

On purchase and shipment of merchandise, with funds in hand, on cost and charges.....	2½
Collecting delayed and litigated accounts	5
Effecting marine insurance, on amount insured.	½
No charge to be made for effecting insurance on property consigned.	
Landing and re-shipping goods from vessels in distress, on value of invoice .	2½
do. do. on specie and bullion.....	½
Receiving and forwarding merchandise entered at Custom-house, on invoice value 1 per cent, and on expenses incurred.....	2½
On consignments of merchandise withdrawn or re-shipped, full commissions are to be charged, to the extent of advances or responsibilities incurred, and one-half commission on the residue of the value.	
On giving bonds that passengers will not become a burthen on the city, on the amount of the bonds	2½
The risk of loss by robbery, fire, (unless insurance be ordered,) theft, popular tumult, and all other unavoidable occurrences, is, in all cases, to be borne by the owners of the goods, provided due diligence has been exercised in the care of them.	

SHIPPING.

On the purchase or sale of vessels.....	2½
Disbursements and outfit of vessels.....	3½
Procuring freight and passengers for Europe, East Indies, and domestic ports	2½
Procuring freight and passengers for West Indies, South America, and other places	5
Procuring freight and passengers for foreign vessels, in all cases.....	5
Collecting freight	2½
Collecting insurance losses of all kinds	3½
Chartering vessels on amount of freight actual or estimated, to be considered as due when the charter parties are signed.....	2½
But no charter to be considered binding till a memorandum, or one of the copies of the charter, has been signed.	
On giving bonds for vessels under attachment in litigated cases, on amount of liability.....	2½

[REMARKS.] The foregoing commissions to be exclusive of brokerage, and every charge actually incurred.

PYRITES.

THEASURY DEPARTMENT, October 29, 1860.

SIR:—I have carefully examined your report of the 3d ultimo and the appeal of Messrs. RECKNAGEL & Co. from your decision levying a duty of 15 per cent on an importation of merchandise—described in the entry as “pyrites or iron ore,” and in the invoice as “pyrites,” under the classification in schedule E of “mineral and bituminous substances, in a crude state, not otherwise provided for,” the importers claiming to enter it at a duty of 4 per cent under the classification of “brimstone, crude, in bulk,” in schedule H. The article in question is not “crude brimstone” in fact, nor so known in commerce, but is a chemical combination of sulphur and iron, known under the name of “pyrites or the sulphuret of iron,” from which sulphur may, by certain processes be obtained. It is not specially named in the tariff, but was properly subjected by you to a duty of 15 per cent, as it may be regarded either as falling under the classification in schedule E to which you appear to have referred it, or as non-enumerated. In either case, it would be liable to the rate of duty exacted by your decision, which is hereby affirmed. I am, very respectfully,

HOWELL COBB, Secretary of the Treasury.

AUGUSTUS SCHELL, Esq., Collector, &c., New York.

NAUTICAL INTELLIGENCE.

STEAMBOAT ACCIDENTS DURING 1860.

The subjoined table shows the number of persons killed and wounded by steamboat accidents on the inland waters of the United States during the past year, compared with the number of killed and wounded by the same causes in 1859 :—

Months.	1860.			1859.		
	Accidents.	Killed.	Wounded.	Accidents.	Killed.	Wounded.
January.....	1	..	..	3	6	8
February.....	1	..	1	2	109	75
March.....	7	52	24	2	45	..
April.....	4	35	17	5	63	41
May.....	4	29	9	1	3	..
June.....	2	26	14	2	8	18
July.....	1	5	6	2	3	2
August.....	1	9	4	2	1	7
September.....	2	357	11	.	.	.
October.....	1	39	20	.	.	.
November.....	4	40	18	2	4	.
December.....	2	5	10	.	.	.
Total.....	29	597	184	21	242	146

During the past eight years the number of lives lost and persons injured by steamboat accidents, not including those which occurred at sea, is as follows :—

Years.	Accidents.	Killed.	Wounded.	Years.	Accidents.	Killed.	Wounded.
1853.....	31	319	158	1858.....	27	300	107
1854.....	48	587	225	1859.....	21	342	146
1855.....	27	176	107	1860.....	29	597	134
1856.....	29	358	127				
1857.....	30	322	86	Total.....	242	3,001	1,090

SCREW PROPELLERS.

The loss of screw propellers during the ten years of lake business, shows, first, an increase of the use of this kind of vessels, and second, the decrease in disasters as navigation has improved, and knowledge of managing propellers has advanced. Many conclusions will suggest themselves to the underwriter and shipper who may examine the following tabular statement of the number, and the losses in dollars :—

Year.	Am't loss.	Wreck- ed.	Strand- ed.	Fire.	Dam- aged.	Jetti- son.	Col- lision.	Raised.
1848.....	\$39,000	.	1	1	1	1	1	1
1849.....	113,000	.	1	1	.	1	.	1
1850.....	16,000	.	4	1	1	.	3	.
1851.....	133,200	2	5	.	4	.	10	.
1852.....	274,050	4	5	3	11	4	8	.
1853.....	101,500	1	7	.	10	2	4	.
1854.....	680,100	5	.	2	30	7	8	.
1855.....	1,159,959	7	11	.	34	4	10	.
1856.....	888,960	7	19	6	22	2	19	.
1857.....	254,542	1	17	4	33	1	7	.
1858.....	91,830	1	1	5	20	2	9	.
Total.....	\$3,752,131	28	78	23	137	24	35	2
Total number of vessels.....								402

THE DEATH RECORD ON THE LAKES FOR 1860.

Lake navigation opened on the 5th of March, 1860, and closed on the 14th of December. The aggregate of loss of life is fearfully large. It is larger than that of any previous three seasons. Five hundred and sixty persons met their death, between the 23d of March and the 25th of November, a period of eight months, by water, steam, and cold, and the casualties incident to working sail vessels. In this calculation the loss of the *Lady Elgin* is put at 400 souls.

Seventy-eight lives, chiefly if not entirely those of seafaring men, were sacrificed to the demon of the waters and to the frost and snow in the terrific gale that swept the lakes on the 23d and 24th days of November.

Twenty seamen, on nearly as many different vessels, while in the performance of their duty, were swept overboard during the season and drowned.

Thirty-five persons met their deaths by being scalded by violent concussions or by being drowned, in consequence of explosions of boilers. Six entire crews were lost, not one being left to tell the tale.

POSTAL DEPARTMENT.

GENERAL POST-OFFICE.

The following is a statement of revenue and expenditures for eight years, from 1853 to 1860, inclusive, and estimates for 1861 and 1862, to wit:—

Years.	Expenditures.	Revenues.	Deficiencies.
1853.....	\$7,982,756 59	\$5,940,724 70	\$2,042,031 89
1854.....	8,577,424 12	6,955,586 22	1,621,837 90
1855.....	9,968,342 29	7,342,136 13	2,626,206 16
1856.....	10,407,868 18	7,620,821 66	2,787,046 52
1857.....	11,507,670 16	8,058,951 76	3,453,718 40
1858.....	12,721,636 56	8,186,792 86	4,534,843 70
1859.....	14,964,493 83	7,968,484 07	6,996,009 26
1860.....	14,874,772 89	9,218,067 40	5,655,705 49
1861.....	15,665,135 04	9,676,711 00	5,988,424 04
1862.....	14,955,535 23	10,388,934 60	4,566,600 63

POSTAGE STAMPS AND STAMPED ENVELOPS.

The number of postage stamps supplied to postmasters during the year ended June 30, 1860, was as follows, viz.:—

One-cent.....	50,728,400	Ten-cent.....	3,898,450
Three-cent.....	159,463,600	Twelve cent.....	1,658,500
Five-cent.....	579,360	Twenty-four-cent.....	52,350
Whole number.....	216,870,660	value.....	\$5,920,939 90
Stamped envelopes.....	29,280,025	value.....	949,377 19

Total amount for 1860.....	\$6,870,316 19
Total value of postage stamps and stamped envelopes issued during the year ended June 30, 1859.....	6,261,533 34
Increase during 1860.....	608,782 85

Larger denominations of postage stamps have been adopted and introduced, especially for the purpose of affording requisite facilities to prepay the postage on letters to foreign countries, and of removing all excuses heretofore existing for paying such postages in money. The new denominations are twenty-four cents, thirty cents, and ninety cents. The two latter have been introduced since 1st July last, and the sales, up to November 1, have been as follows:—

Thirty-cent stamps, 140,860; amounting to.....	\$42,258
Ninety-cent stamps, 15,841; amounting to.....	14,256
Previously to July 1, there were issued of twenty-four-cent stamps, 52,350; amounting to.....	12,564
From 1st July to 1st November, 287,975; amounting to.....	69,114

Total issues of new denominations, 497,025; amounting to..... \$138,192

A new die for embossing the stamp on the postage-stamped envelopes has been adopted, which is believed to be an improvement on the former one, especially because of reduced size, giving a neater and more attractive appearance to the envelop.

There has also been introduced a novel description of stamped envelopes, embracing what is called the "self-ruling improvement," consisting of black lines so arranged within the envelop as to afford a correct guide for writing the address of a letter, but which lines are concealed after placing the letter in the envelop. Of these envelopes there has been issued, up to November 1, 3,442,150.

It is contemplated to introduce immediately two new denominations of envelopes: one embossed with a one-cent stamp, the other with both the one and the three-cent stamps.

The one-cent envelop is designed mainly for circulars, of which many millions are annually distributed through the mails. The same envelop, however, will also be largely used for city correspondence.

The envelop with the one-cent and three-cent stamps will be required in cities where there are lamp-post letter-boxes or other depositories for letters, to be conveyed by carriers to the post-office, the one-cent paying the carrier's fee, and the other stamp paying the postage on letters to be sent out of the city by mail. This envelop will also be used by those who, when addressing their city correspondents, desire to relieve them from the payments of the carrier's fee for delivering their letters at their domicil.

Proposals were made during the last session of Congress to furnish the department with wrappers or envelopes embossed with one-cent postage stamps, for the purpose of prepaying transient newspapers, and the subject was considered by the committee on the post-office and post-roads. Recently similar proposals (from another party) have been made, with the suggestion that not merely one-cent, but also two-cent newspaper wrappers be provided; and the subject is recommended to Congress for such disposition as it may deem necessary.

DEAD LETTERS.

The number of dead letters containing money, registered and sent out during the year ended 30th June last, was.....	10,450
The number containing other articles of value.....	13,585

Total..... 24,035

Being 5,662 increase on the work of 1859.

In addition, there have been sent out, since April last, 6,982 other letters, of a class which were heretofore either destroyed or filed, not containing inclosures of sufficient absolute value to justify their registration.....	6,982
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Making whole number sent..... 31,017

Or 12,644 more than during the previous year.

Whole number of dead letters opened at San Francisco.....	75,127
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FOREIGN LETTERS.

Returned to England	41,835
" France.....	13,400
" Bremen	6,178
" Hamburg.....	2,517
" Prussia.....	17,317
" Canada.....	25,800
" New Brunswick.....	2,041
" Nova Scotia.....	1,693
" Prince Edward's Island.....	130
Total number of foreign letters.	110,911

Persevering efforts have been made, so far as the limited number of clerks would permit, to find the true causes for the non-delivery especially of *valuable* letters, and the result has been to confirm the former experience of the department, as stated in the annual report of last year, and the special report of 7th May last. For example: out of 8,002 cases, in which the inquiries of the department have been answered, or where causes were patent without inquiry, 3,983 letters were misdirected, 621 illegibly directed, 583 directed to transient persons, 336 to persons moved away, 657 not mailed for want of postage, 885 directed to fictitious persons or firms, 54 without any address or direction, 34 missent, leaving, out of 8,002, only 1,341 letters properly addressed, and only 684 for the non-delivery of which the department is blamable, 657 having become dead because not prepaid.

In reference to the class of letters not containing money or other valuable inclosures, a similar state of facts seems to exist. The number returned to the dead letter office for want of postage during the past seven months, to November 1, was 22,259.

Out of 37,868 letters without inclosures, the number for want of proper direction was	10,178
Number entirely without address or direction.....	357
Total.....	10,535

Although the number of letters conveyed by mail during the year has increased by many millions, (as shown by the increased revenue of over \$500,000,) yet the whole number of dead letters, so far from increasing, has rather diminished. From this fact, it may be concluded that better attention than formerly is now given to the delivery of letters, and that the new regulations on the subject have had a salutary effect.

If the proper assistance could be obtained, further improvements might, no doubt, be made, and the propriety of authorizing the employment of temporary clerks to make experiments with the dead letters is urged. somewhat according to the plan proposed in the special report of May 7, 1860. It might, perhaps, be sufficient for the present, simply to authorize the use of the dead letter money (which cannot be restored to the owners,) including what has heretofore accrued and that to accrue in future, or so much of it as may be necessary, for the improvement of this branch of business.

The new law concerning the return of letters, upon which the names and post-offices of the writers were indorsed, was communicated specially to all post-masters; but, as yet, it seems to have been measurably inoperative.

JOURNAL OF MINING, MANUFACTURES, AND ART.

HOW THE ARMSTRONG GUN IS MANUFACTURED.

A visitor to the works who has never seen an Armstrong gun, must, as he witnesses the successive stages of its manufacture, be sorely puzzled to conceive what it will look like when completed; and scarcely less is the surprise of any one who has seen the finished piece, at the strange shapes which its component parts assume during the various processes. Let us begin at the beginning, and observe the various steps, from first to last, in the creation of the most perfect piece of ordnance the world has ever seen.

Imagine a very long thin bar of the finest iron, some two inches square, and one hundred and twenty feet in length—that is the basis of a twenty-five pounder. For convenience in the manufacture, the bore is divided into three pieces of about forty feet in length. A one-hundred pounder requires three pieces, each of ninety feet in length. The manufacture commences in the forging shop, a vast dingy shed, where there is an incessant din of hammers and roaring of mighty furnaces, where blocks and bars of iron lie scattered in seeming confusion on every side—here almost transparent at white heat, there glowing red hot; in one corner sending out showers of sparks under the discipline of a huge steam hammer; in another, hissing and sputtering under a stream; where stalwart, grimy men, with uprolled shirt sleeves, visors and leather aprons, are seen looming through the smoke, or in the full glare of the fires, tossing about red-hot bars with the indifference of salamanders, and making the anvils ring with thirty Cyclops' power.

We fix our eyes on a long, narrow furnace, in which lie a number of iron bars we spoke of. Suddenly the door is opened, and a fierce lurid gleam of light is cast through the shop. One of the men seizes the end of a bar in a pincers, drags it forth, and makes it fast to a roller which stands immediately before the furnace, and the diameter of which is equal to the rough-made tube of a twenty-five pounder when first rolled. The roller is put in motion, the bar is slowly and closely wound round it, just as one might wind a piece of thread round a reel. The roller being turned on one end, the spiral tube—number one coil, it is termed—is knocked off, restored to white heat in another furnace—for it has cooled somewhat in the rolling—and then flattened down and welded under one of the steam hammers till only about half as long as it was. For a twenty-five pounder the length of the coil, after this process, is $2\frac{1}{2}$ feet; and three such coils are welded together to form the tube.

Before that operation is performed, however, each coil is bored on the inside, and pared on the outside to within a very little of its proper diameter, so that the slightest flaw in the welding, if any exist, may be detected. Having passed this test, a couple of coils, brought to a proper heat by being placed end to end in a jet of flame from a blast furnace, are welded by violent blows from a huge iron battering-ram. A third coil is added to the other two in the same manner, and the tube is complete. Over this a second tube, which has been prepared just in the same way, is passed while red hot, and, shrinking as it cools, becomes

tightly fastened. This is termed "shrinking on." Over this again is placed a short massive ring of forged iron, to which the trunnions, or handle of the gun, are attached.

The breech, which has now to be added, is composed of several iron slabs, something like the staves of a barrel, which are bent into a cylindrical form, and welded at the edges when red hot under the steam hammer. In the breech the fiber of the metal runs in the direction of the length of the gun, while in the other parts it winds round and round transversely. This is done to give greater strength to the breech in sustaining the whole backward thrust of the explosion. The breech thus formed is "shrunk" on to the rest of the gun; and to add still more to its strength, two double coils of wrought iron are rolled on, with the fiber at right angles to that of the breech underneath. The piece now exhibits very much the appearance of what is called a three-draw telescope—the tube, the trunnion piece, and the breech, representing the three draws of the glass when pulled out.

So much for the rough work of the gun; we now come to the finer and more delicate process. Having been pared down on the outside to its proper size, the gun passes to the measurers, who, with an instrument called a micrometer, measure each part with mathematical accuracy. The slightest deviation of any portion from its exact size, even to the fraction of a hair's breadth, is rigidly pointed out, and has to be amended. The boring and rifling of the piece are next performed in a large, tidy, well-lighted room, where there is no noise, or smoke, or confusion, as in the forging shop. The gun is placed erect in the boring machine, and revolves gently round the big gimlet, which slowly but surely makes its way downwards, scooping out the superfluous metal from the interior of the tube.

Four pieces can be bored at once by each machine. This is the lengthiest process the gun has to go through. It has to be performed twice, each time occupying six hours. First the gun is bored to within a one-hundredth of an inch in its proper diameter, and the second time it is finished. The rifling is performed in a turning-lathe, and occupies some five hours. There are thirty-eight fine sharp grooves, of a peculiar angular shape—"with the driving side angular," in the words of the inventor, "and the opposite side rounded," and the turn of the rifling is very slight.

Where the touch-hole of an ordinary gun would be, a square hole is cut for the introduction of the vent place or stopper, which, with the breech screw, completes the gun. The stopper is a circular piece of steel, faced with copper, which fits into the end of the rifled barrel with the most exact nicety. Upon this little piece of metal depends, in a great measure, the efficiency of the gun; because, unless it hermetically closed the cavity, a portion of the explosive force would escape, and the discharge would be weakened. The copper facing of the stopper is prepared with great care. It has to be sharpened with a file after so many rounds, and a duplicate accompanies every gun. The touch-hole runs through the vent-piece down into the chamber of the gun. The breech of the gun receives the powerful hollow screw which presses against the vent-piece, and is easily tightened or loosened by means of a common weighted handle. When the stopper is out, the gun is a hollow tube from end to end.

MINES AND MINING COMPANIES OF ARIZONA.

We find in a late number of the *Mesilla Miner* the following resume of the mines and mining companies in Arizona :—

1st. FORT FILLMORE SILVER MINING COMPANY.—Capital stock \$1,000,000, in \$20 shares. Maj. Jno. J. Sprague, U. S. A., President. Office 34 Pine-street, New York. Mines in Organ Mountains, 15 miles east of, and smelting furnace on Rio Grande, 4 miles S. E. of Mesilla. W. H. Ritter, engineer. Has six fine veins, yielding \$200 per ton. Commenced work in December, 1859, employing fifty hands.

2d. SONORA EXPLORING AND MINING COMPANY.—Organized in 1856, under charter from Ohio. Capital \$2,000,000, in \$100 shares, James P. Kilbreth, President, A. M. Searles, Secretary, Andrew J. Talcott, Superintendent. Leased to Charles D. Poston. Mine in Cerro Colorado Mountains near Tubac, ore silver and copper. First silver reduced July, 1858.

SANTA RITA SILVER MINING COMPANY.—Organized 1858, charter from Ohio. Capital \$1,000,000, in \$100 shares. Office 167 Walnut-street, Cincinnati, Ohio. George Mendenhall, President; Horace C. Grosvenor, director of the mines, Rephael Pumpelly, metallurgist, headquarters and mines, Santa Rita Mountains near Tubac. Persons employed 20; first silver reduced May 7th, 1859. Ore silver, copper, and lead.

SOPORI MINING COMPANY.—Organized August, 1858. Capital \$1,000,000, in \$100 shares. Office Providence, R. I. Mines near Sopori. W. B. Sayles, director. Not working the mine.

PATATONIA MINING COMPANY.—Private association—Capt. R. S. Ewell, U. S. A., President. Mines near Sonoita Creek, in Santa Cruz Mountains. The mine is valuable, and has yielded, with very little machinery and poor furnaces, a fine percentage of silver. Ore silver and lead.

UNION MINING COMPANY.—Private association—working mines near Sonoita Creek; under direction of Col. Titus.

THE SAN ANTONIO MINING COMPANY OF SAN FRANCISCO.—Has suspended operations for the present. Ore silver and lead.

THE CAHUABI MINING COMPANY.—Private company—H. Ehbrenberg, President; William Brown, director. Mines in Papaguarica—a new company now commencing operations. The mine is said to be very rich. Ore silver and copper.

SAN XAVIER MINING COMPANY.—Organized in San Francisco in 1857; mine near Tuscan. Work suspended.

ARIZONA LAND AND MINING COMPANY.—Capital stock \$2,000,000, in \$100 shares. Organized under charter from Rhode Island. Samuel B. Arnold, President; W. B. Sayles, director. Not working mines.

THE LONGORENIA COMPANY.—Organized to work an old mine near Tubac. The work is progressing. Ore silver and copper.

COPPER.

ARIZONA COPPER MINING COMPANY.—Capital \$1,000,000, in \$100 shares. Organized 1854, in San Francisco, by E. E. Dunbar. Major R. Allen, U. S. A., President. The company have expended much money, and now have ordered steam wagons to transport the copper to market. This mine is very rich.

THE SANTA RITA COPPER MINES.—Worked by Mr. Siqueros & Son. They have not completed their arrangements yet, but are smelting three tons of copper per diem. These mines were worked many years ago, and are rich and profitable. Located 25 miles N. W. of Mowry City, on Mimbres River.

THE HANOVER COPPER MINES, six miles from the Santa Rita mines, were discovered March, 1859, by Mr. S. Harkle. The vein is ten or twelve feet wide. Messrs. Harkle & Thibault are working 500 hands with great profit.

Messrs. Barcla, Daguerre, and others have opened a vein one-and-a-half miles from the Hanover mine, and preparing to work.

A private company have been working on a vein half a mile from the Hanover mine, thought to be rich.

A copper mine is worked 40 miles above the mouth of the Gila, on the Colorado River, said to be very rich.

GOLD.

GILA GOLD MINES.—Much gold has been taken out of these mines, located twenty miles above the mouth of the Gila, and about two miles from the river. Mines are rich, but too far from water, and the necessities of life, to include very extensive working.

BROWNSVILLE GOLD PLACERS.—Twenty miles N. W. of Mowry City, on Mimbres River, are now worked by a company from this place, who have dug a ditch, at considerable cost, one-and-a-half miles long, to throw the water on the placer. They have been sufficiently tested to show that they are rich.

Col. Snively & Co. have discovered rich gold mines 15 miles north of the Brownsville mines, and are now working them.

ARIZONA EXPLORING AND MINING COMPANY.—Lately organized, with ample means for prosecuting a geological survey. Richard Jenkins, superintendent; Mr. Levy, miner. Headquarters Mesilla, on Rio Grande.

THE MESILLA LAND EXPLORING AND MINING COMPANY.—Capital stock \$1,000,000, in \$100 shares. L. S. Owings, President. Office Grand Plaza, Mesilla, Arizona. This company have a good quartz lead, thought to be very rich, and a copper vein. They propose keeping an exploring company constantly in the field.

NEW DISCOVERY IN THE PROCESS OF DYEING.

The dyeing trade has, it is announced, just been enriched by an important discovery. For a long time back, the trade has been endeavoring to avail itself of and to imitate the green dye used in China, (*le vert de Chine*), whose brightness and solidity enjoy such just celebrity. It appears to have succeeded in obtaining it from one of our (French) indigenous vegetable substances, thanks to the investigations of a chemist at Lyons, who had been put on the right track by an instructive note which the Chevalier de MONTIGNY had sent from China, along with samples of the primary substance, to the Department of Commerce, and which Mr. ROUHER had brought to the knowledge of our Chamber of Commerce and Manufactures. This will be a fresh success to add to our numerous agricultural and industrial triumphs, for which the country is already indebted to the intelligent efforts of our Consul-General in China.

RICHMOND SUGAR REFINERY.

The refinery just opened at Richmond is described as a building 125 feet long by 50 feet in width, and five stories high. It is built of brick, in the most substantial manner, upon a foundation of granite, and seems to be well adapted to the purposes for which it was erected. The most striking feature about the establishment is the great number of iron and copper pipes, of different sizes, extending in all directions, under each floor, and vertically. These pipes are intended to conduct the syrups and steam from one part of the building to another. The machinery and appurtenances have been constructed upon the most approved plan, and in accordance with the latest improvements. Indeed, it is said that this refinery is the most complete one, in this respect, in the United States. There is no handling or dipping here, the whole process being carried on by mechanical contrivances, beginning with the elevation of the raw material from the basement to the upper story. Adjoining the refinery is a bone kiln, built of brick, in which the "bone black" used in the refinery will be made. On the north side of the building is the boiler house, containing three large boilers for generating and supplying steam to the engines and tanks. The smoke stack attached is eighty feet in height. No fire will be used in the building, as all the heating and boiling will be effected by means of steam from the large boilers. The water used for the clarification of the sugar is brought from Mount Erin spring, about half a mile distant, while the supply for the boilers is drawn from the river by means of a pump propelled by steam apparatus. All the machinery was made at Messrs. MERRICK & SONS' "Southwark Foundry," Philadelphia, and was put up by Mr. Wm. H. BECHTEL, an experienced machinist. The establishment will turn out about 175 barrels of sugar per diem.

IRON CARS.

We notice another attempt to introduce iron cars for passenger purposes has been recently made. The side walls are made of corrugated sheets, and are of two thicknesses, with a space between. The advantages claimed for the iron cars are greater lightness, strength, and durability, than are possessed by the ordinary wooden car. There is a saving in weight of 30 to 35 per cent in this car over those in common use. This is an advantage which will be readily appreciated by every railroad man. A saving of one to two thousand pounds in the weight of the vehicle makes a wonderful difference both to the power which drags it, and to the rails over which it is drawn. The next advantage claimed is greater safety than in wooden cars. In cases of accident the greatest damage is generally done by the splintering of the timbers. This fruitful cause of injury is entirely done away with in iron cars. The worst that can possibly happen to an iron car is severe indentations and bruises. We are glad to see a step made in this direction. We regard any saving in weight and safety in a railroad passenger coach as a great gain. The effort seems to have been for the past few years to continue adding appendage after appendage, constantly increasing the weight of the cars, and consequently the cost of transporting passengers. We trust the experiment now made will prove as successful in the end as it seems to be in the outset.

HOME MANUFACTURES.

Many of our farming friends, says the *Californian*, who visited the exhibition of the San Francisco Bay District Agricultural Society, doubtless noticed some samples of remarkably fine blue vitriol, of California manufacture. Feeling great interest in a matter so intimately connected with agriculture, we made some inquiries concerning this new branch of home manufacture, and were agreeably surprised to find that it is manufactured here now in such a manner that it can be afforded at a less price, and that it is in reality a very superior article, to any imported, either from the Eastern States or from Europe. Under the new process of refining gold in the great establishment of Messrs. ALSOP & Co. and DUNCAN, SHERMAN & Co., large quantities of pure copper are used in solution with sulphuric acid, and this forms pure sulphate of copper, or blue vitriol. As any foreign substance would destroy the properties of the solution, it must necessarily be *perfectly pure*, and being formed as a residuary product in very large quantities, it can be sold at far less rates than when manufactured especially for consumption.

More than fifty thousand pounds were manufactured in the few months that the refinery has been in operation this season, and the proprietors anticipate that their business will be so largely increased during the coming year, that they will be obliged to export a large portion of their surplus, the demand on this coast not being equal to the large amount they must necessarily manufacture. We congratulate the farming interest on the certainty of hereafter being able to calculate on a supply of fine blue vitriol at low prices, and that they will not be the victims of speculators, who have on several occasions monopolized all that article in the market, and taken advantage of the farmers' necessities to exact an exorbitant price.

SABOTS, OR WOODEN SHOES.

Many of our people, says the *Shoe and Leather Reporter*, who look upon wooden shoes only as objects of curiosity, as though they were relics of a barbarous age, or the production of some benighted heathen of the East, may be surprised to learn that they are at present not only manufactured, but generally worn, by the peasantry of France, throughout the provinces of Normandy, Brittany, Auvergne, &c. The language of the Abbe LEBLANC, written a century ago, would still apply to a considerable portion of that country:—"Among the curiosities in the cabinet of natural history at Oxford, they specially show a pair of (*sabots*) wooden shoes, which they designate *French shoes*, and the ordinary shoe of the nation."

The principal markets are Paris, Lyons, and Nantes, whither the manufacturers or master sabot makers repair once a year to make contracts with the tradesmen. Thus furnished with a memorandum of the number and variety required, they return and distribute the work among the people. Men, women, and children leave the villages in a body, and, marching to the forests, build themselves huts of branches, plastered with mud, and set about their task with true French vivacity, chatting, singing, and laughing incessantly. Beech, birch, and sometimes walnut and aspen trees are cut down for material, and then begins the process of modeling into boot, shoe, and gaiter *sabots*. They are

shaped by the men, hollowed by the women, and roughly pared by the children. The latter are considered as apprentices, but the others receive for their services respectively two francs, (37½c.) and fifty centimes, (9½c.) per diem. A French paper, the "*Moniteur de la Cordonnerie*," states that one Paris maker alone employs in the forests of Sarthe, Orne, Cantal, and Vosges, twenty-five master workmen, and one thousand peasants.

When the rough work is completed, the sabots are sent directly to the Parisian and other dealers, by whom they are finished and placed in the market for sale. Those called "garnished" are covered with leather; but most of them are at first blackened with burnt horn and other animal substances, and afterwards polished. The rooms in which this part of the business is conducted are continually filled with effluvia, which causes serious inroads on the health of the operatives.

The authority we have quoted above says that England, although regarding sabots with much contempt, purchases upwards of 10,000 francs' worth annually. The habit of wearing wooden shoes probably arose from poverty or from local necessity, and the practice has so little to recommend it, either for comfort or cleanliness, and seems so opposed to the progress of modern times, that we wonder it has not long since been abandoned. There are millions of feet in France which undoubtedly will, ere long, furnish employment to the manufacturers and workers of leather in that or some other country.

MANUFACTURE OF GAS.

The process of manufacturing is as follows:—A panful of coal is put into an iron retort, under which is a furnace that heats the retort red hot, turning the coal partly into gas and partly into coke. The latter remains in the retort, while the gas passes out through a pipe half-filled with water, called the hydraulic main, the force in the retort being sufficient to drive it through the water and over the surface, but it cannot pass back, as the water acts as a seal to secure it. Thence it is conducted into a condensing pipe to the condensing house, where its heat and volume are reduced. It is then transmitted to the purifying house, where it passes through three distinct beds of lime, which extract the sulphurous particles from it. There are test cocks attached to the purifiers, by which its purity is tested. The cock is turned to let the gas out, and a piece of paper saturated in a solution of sugar of lead held over it, and if it stains the paper it is impure. It is said that sugar of lead will detect one impure part in 40,000 cubic feet.

CIGARETTE PAPERS.

Mention has been made of the discovery of a new kind of paper for making cigarettes, and a manufactory has been established in Algiers for working this new invention. The paper in question is made from the refuse stalks and portion of the leaves which have been hitherto thrown away or burnt as useless. It has been calculated that the value of the rags from which the paper for the cigarettes has been usually made amounted annually to from 9,000,000 francs to 10,000,000 francs. The benefit which France will derive from this invention may be therefore readily conceived, and no doubt can exist that the manufacture must be attended with great success.

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

STEAM WAGONS FOR COMMON ROADS.

This is an age of progress and improvement, says the *Railroad Record*, and we know of no place where improvement is more needed or where there is a greater field for it than in the means of locomotion on turnpikes and common roads. When the steam engine first began to exert its labor saving influence, considerable attention was given to its application to locomotion; and the results of this direction of inventive genius have been the railroad locomotive of the present day. Genius has had such a rich field for study and progress in this latter and more perfect mode of locomotion, that the primary idea has been, in a great measure, lost sight of in the grand developments of the more perfect system. But now that we have almost covered the civilized portions of the world with a network of railroads, we are beginning to revert again to the parent notion, and inquire, is it feasible to construct a steam wagon for traveling on our common roads? Can we successfully introduce steam as a means of propulsion for loaded wagons and stage coaches traveling on ordinary turnpikes? Most assuredly we can, provided we are willing to undertake the labor necessary to make the practical application of the power to the load. The locomotive of thirty years ago weighed three tons, and was a very different thing, both in structure and appliance, from the ponderous iron-lunged steed that now sweeps over our roads at its easy gait of thirty miles per hour. So it will be with the steam wagon, its first application will be far different from its perfected form, and it is but reasonable to suppose that time and experience will both improve and cheapen it. The perfected machine will be as much superior to the first attempts as they will be superior to the present mode of moving by horse-power. But we should not, on that account, fail to avail ourselves of the earlier improvements as they are made. It is certainly much cheaper to furnish wood or coal for a boiler than oats or corn for an equivalent number of horses. And for ease of management and docility to the will of the driver, there can be no comparison between the almost animate machine and the baulky animal. The difficulties that have hitherto beset the inventors of steam wagons have mostly arisen from the fact that their ideas were fixed upon too grand a scale—they have aimed to make a machine of ponderous power, one that would carry along a huge train and drag its hundreds of tons of burden. A more practical way would be to begin with an engine of given capacity, say ten-horse power, and adapt it to a wagon, and determine by experiments on a moderate scale what would be its capacity for transporting loads. In this manner, at a trifling cost, the most important question could be readily determined and settled. From this commencement the inventor could build up and improve, as his success in the first experiment indicated.

In a recent visit to New York city we had the pleasure of examining a road engine invented and built by Mr. J. K. FISHER, and designed for transporting passengers at a rapid rate. The drivers are two wooden wheels five feet in diameter and six inches broad on the face of the tire, driven by two cylinders of seven inches bore, and fourteen inches stroke, acting directly upon the driving

wheels. The boiler is an upright tubular boiler thirty-two inches diameter, five feet high. The whole was originally placed on a wooden frame resting on easy springs, and was designed to be run at the rate of twelve to fifteen miles per hour. Experimental trips were made, and a speed not merely twelve to fifteen miles, but twenty-two-and-a-half miles per hour obtained. No difficulty was experienced in ascending hills, the speed, of course, being lessened. This engine is now undergoing some modifications such as suggested by experience, and has been placed upon an iron frame, and will, we understand, be shortly tested again. With the improvements already made we have no doubt it will fulfill the most sanguine expectations of its inventor.

This experiment on our own shore, together with the success of recent inventions in England and Scotland, warrant us in the belief that steam will be successfully applied to stage coaches. And the fact that a steam engine has been recently constructed which does successfully drag ten plows is sufficient evidence that it can also be applied to slow locomotion for loaded trains. We hope to see more attention hereafter devoted to this subject.

IRON LOCOMOTIVE CAR.

A new iron locomotive has been built for the use of the Pittsburg, Fort Wayne, and Chicago Railroad. This car is a novel invention, combining in itself all the parts of a complete train—engine, baggage car, and passenger car. It is made wholly of iron, with the exception of the flooring, sash, and seat-trimming, and is one of the most beautiful railroad conveyances we ever saw.

The dimensions of the locomotive car are 77 feet in length and 10 feet in width. It contains 48 seats, each of which are 3 inches wider than those of the ordinary wooden car, and are constructed of iron. They do not revolve backwards and forwards, but are stationary. The back is supported merely by a piece of wire net work stretched between the two ends, on one side of which, as well as on the seat, is a covering of lead-colored plush, padded with hair, and on the other side leather or the same material, similarly padded. This wire net work is an admirable improvement, and contributes much to the comfort of the seats. Besides, the seats thus constructed are very light, the whole number weighing 1,500 pounds less than as many of the old style car seats. In the center of the car is the saloon, which, in a pinch, could be made to accommodate three or four more persons. Its central position is quite an advantage, as those who use it will not have to walk the whole length of the car to get to it. The interior of the car is handsomely finished; but one blunder has been made in the arrangement of the windows, which are so low that a person has to stoop to look out of them. This arose, we understand, from giving the roof an unusual pitch, and will be remedied in the next car that is made. The danger of weakness in the center from the extreme length of the car is obviated by running an iron truss between the trucks. The sides of the car are firmly braced by rods connecting with the truss, rendering it stronger and increasing the chances of safety in case of a collision. The driving-wheels are about 36 or 40 inches in diameter, and are propelled by engines of twenty-horse power. The engines are provided with a small doctor to supply water to the boiler. This is highly conducive to safety, but seldom or never met with on locomotives. There is an ordinary brake at the rear end of the car, but one of a different description

has been figured out by the makers, and will be under the immediate control of the engineer.

The advantages contemplated by the introduction of this locomotive car are several. It is more economical, as it will do nearly the same amount of business as an engine and two cars, with a baggage car, and costs less than the engine alone. The expense of constructing it will not exceed \$8,500. It weighs less than 16 tons, while a train of equal capacity will weigh 85 tons. It can be run 120 miles with one cord of wood, while an equal quantity would only run a locomotive 40 miles. It is much safer, both on account of its lightness and of the material of which it is made. Its momentum, when going at a high speed, will be vastly less than that of a train of cars, and it may therefore be stopped at a shorter notice. Being wholly iron, there would be no splinters flying in case of a smash up, and the flexibility of the material would make the car gradually yield to a violent shock, instead of going to wreck at once. Notwithstanding its lightness, it can be run at great speed.

RAILROAD ACCIDENTS DURING THE YEAR 1860.

The following table shows the number of railroad accidents which have occurred in the United States during the year just closed, which were attended with loss of life and injury to persons, together with the number of killed and wounded, compared with the number of like accidents in 1859 :—

	1860.			1859.		
	Accidents.	Killed.	Wounded.	Accidents.	Killed.	Wounded.
January.....	11	5	58	7	4	54
February	10	8	32	9	6	18
March ...	1	.	6	9	8	13
April.....	5	4	17	6	8	15
May.....	5	5	13	5	4	24
June.....	4	4	38	10	47	96
July.....	5	5	14	9	5	27
August	6	5	29	3	16	32
September	7	8	63	6	4	55
October	8	6	24	6	10	8
November.....	4	7	5	5	15	35
December	8	5	16	4	2	34
Total.....	74	57	315	79	129	411

The above figures do not include individual accidents, caused by the carelessness of travelers themselves, or deaths or injuries resulting from the reckless conduct of persons in crossing or standing upon railroad tracks where trains are in motion.

The following additional table shows the number of accidents, and the number of persons killed and injured by accidents, to railroad trains during the last eight years :—

	Accidents.	Killed.	Wounded.
1853.....	138	234	496
1854.....	193	186	589
1855.....	142	116	529
1856.....	143	195	629
1857.....	126	160	530
1858.....	182	119	417
1859.....	79	129	411
1860.....	74	57	315
Total in eight years	977	1,166	3,926

A RAILWAY IN TURKEY.

The railway connecting Tchernavoda, (Turkish, *Boghaskeni*.) on the Danube, and Kustendjie, on the coast of the Black Sea, a distance of about forty miles, was opened October 4th. Travelers by this railway will avoid the many dangers attendant on the navigation of the Danube and the delays so common at the Suhna mouth of that river. The opening of this line, which is destined to stimulate the commercial activity of the region, was attended by many of the English directors of the undertaking, and the representatives of Turkey, Greece, Albania, Bulgaria, and many sections of Tartary, whose costumes presented a very picturesque appearance. ETHEM PASHA represented the Sultan on this occasion. The trial trip went off most successfully; a grand luncheon, in the English style, awaited the guests on their arrival at Tchernavoda; and a yet grander dinner was provided for them on their return to Kustendjie, at the "New Railway Hotel," in the garden of which establishment a shed, handsomely decorated, had been erected for the purpose. More than one hundred persons sat down to this international banquet, at which toasts were drunk to the health of Queen VICTORIA and the Turkish Sultan, the PASHA testifying the most cordial interest in the doings of the day, and expressing his hope that similar lines of communication would soon be opened in every part of Turkey.

NEW YORK CENTRAL RAILROAD.

The *American Railway Review*, which has now commenced its fourth volume, has the following on the operations of this important railway for the fiscal year, ending Sept. 30, 1860, compared with previous years since 1857:—

INCOME ACCOUNT—RECEIPTS.

	1857.	1858.	1859.	1860.
Freight.....	\$4,559,276	\$3,700,270	\$3,337,148	\$4,095,934
Passengers	3,147,627	2,532,647	2,566,370	2,569,265
Deficiency of earnings.....	.....	232,246	.....	.....
Other sources.....	320,388	295,495	297,331	292,042
Total.....	\$8,027,251	\$6,760,658	\$6,200,849	\$6,957,241

DISBURSEMENTS.

	1857.	1858.	1859.	1860.
Expenses on freight.....	\$2,269,290	\$1,876,429	\$1,893,155	\$2,613,827
“ passengers.....	2,184,226	1,610,363	1,456,274	1,665,014
Rent Niagara Falls Railroad.....	.....	.....	60,000	60,000
Interest.....	970,871	976,192	970,066	985,272
Discount on bonds.....	.....	70,891	.....	.....
Sinking funds.....	113,294	113,294	116,754	115,266
Dividend, February.....	959,782	959,782	959,782	720,000
“ August.....	959,782	959,782	720,000	720,000
Lake Erie steamers.....	44,470	193,925	.....	.....
Surplus earnings.....	525,536	.....	24,824	77,862
Total.....	\$8,027,251	\$6,760,658	\$6,200,849	\$6,957,241

From the above it will be perceived that the passenger traffic on this road has not increased any since 1857, although the cost of the passenger revenues has varied—being 70 per cent of gross receipts in 1857, 64 per cent in 1858, 57 per cent in 1859, and 65 per cent in 1860. The cost of moving freight was, in 1857, 50 per cent; 1858, 51 per cent; 1859, 59 per cent; and 1860, 64 per cent. Thus, we see that all the advantages of increased freight earnings are lost to the stockholders in the additional cost of its transportation. It is to be regretted that no information from the company's reports enables the shareholder to learn what portion of this increased cost is chargeable to through, and what belongs to local freights. It was generally supposed that a settlement of the

difficulties with the three competing trunk lines, in the autumn of 1859, would produce a more remunerative traffic in 1860. The construction account has been increased \$265,381, and the transportation expenses upon passengers are 8 per cent—equal to \$205,541—and freight 5 per cent—or \$204,796. These items, collectively, indicate, if we understand the report correctly, that \$675,718 have been spent in the new work, extraordinary repairs, and rebuilding the Buffalo Elevator, nearly all of which items have been, until 1860, charged to construction account. Had this plan been adopted in former years, the company would doubtless have been obliged to cut down its dividends as far back as August, 1857.

The following condensed balance sheets give the financial condition of the company since 1857:—

	DEBITS.			
	1857.	1858.	1859.	1860.
Construction	\$30,515,815	\$30,732,517	\$30,840,714	\$31,106,094
Premium on consolidation.....	8,359,977	8,193,000	8,015,000	7,831,000
Cost of road	\$88,875,792	\$88,826,517	\$88,855,714	\$88,937,094
Mich. Cen. Lake Erie steamers...	198,925	.....	.....	.....
Buffalo State Line Railroad stock	557,800	557,800	557,800	557,800
Lewiston Railroad stock.....	142,111	187,850	.....	.....
Troy Union Railroad stock.....	6,881	7,500	21,100	34,700
Hudson River Bridge stock.	10,080	10,080	10,080	20,240
Real estate O. Lee & Co.'s Bank..	.....	.....	84,829	35,214
“ Buf. & Ni. F. R. R. Co.	32,500	32,500	32,500	32,500
Fuel and supplies.....	.....	860,939	286,707	150,934
Trustees Buf. & Roch'r. R. R. Co..	3,156	.....	.....	.....
Bills receivable.....	234,564	28,562	42,758	50,008
Cash and uncollected revenue ...	772,855	522,886	517,338	468,071
Debt certificate sinking fund.....	632,000	792,000	967,600	1,147,600
Trustees Syracuse & U. R. R. Co.	.....	.....	6,681	.....
Lake propellers.....	.....	.....	.....	341,591
Total.....	\$41,461,654	\$41,425,634	\$41,333,605	\$41,785,748

	CREDITS.			
	1857.	1858.	1859.	1860.
Capital stock.....	\$24,136,661	\$24,182,400	\$24,000,000	\$24,000,000
<i>Funded Debt.</i>				
Consolidated roads assumed.....	880,753	657,682	637,737	550,372
Buffalo & N. F. R. R. Co. assumed	55,000	46,000	45,000	35,000
Debt certificates.....	8,892,600	8,892,600	8,892,600	8,892,600
Convertible loan, 1864	3,000,000	3,000,000	3,000,000	3,000,000
Consolidated railroad stocks....	807,000	785,000	770,000	680,000
Real estate.....	204,000	200,000	195,000	175,000
Buffalo & Niagara Falls R. R. Co.	93,500	93,000	90,000	86,000
Funded debt consolidated co.'s ..	.....	1,256,000	1,225,000	1,308,000
Telegraph Company.....	10,000	10,000	10,000	.....
Convertible bonds, 1876.....	.....	.....	182,000	500,000
Bonds and mortgages.....	266,657	254,952	254,034	253,151
<i>Floating Debt</i>				
Bills payable.....	197,033	38,000	.....	127,375
Consolidated roads.....	22,526	1,607	.....	.....
Unclaimed dividends.....	4,593	3,472	5,889	9,037
Sept. expenses paid after Oct. 1..	305,071	81,925	67,555	144,317
Interest not due “ “ ..	361,688	329,270	389,639	328,133
Income account	1,826,572	1,594,326	1,619,151	1,697,012
Total.....	\$41,461,654	\$41,425,634	\$41,333,605	\$41,785,747

The aggregate funded debt shows no material change. That incurred under the act of consolidation has been retired and replaced by the bonds of the com-

pany maturing in 1876. We notice, among the assets of this year, \$341,591 in lake propellers, which must strike stockholders with surprise, as the steamboat business in 1856 and 1857 brought the company in debt \$238,395.

ENGLISH RAILWAY CLERKS.

There are some 16,000 clerks employed in English railways, and various benevolent schemes to provide for the need and danger of such employees, viz., guaranty, superannuation, and life insurance, have, from time to time, been agitated, and, to some extent, adopted. A preliminary difficulty with a young man seeking employment with an English corporation is, to find security for his integrity. The private system is being rapidly superseded by public guaranty societies, based upon a fixed scale of premium. A writer in *Herapath's London Railway Journal* suggests many advantages that would accrue from the establishment of a Mutual Guaranty Fund by the employees themselves. Such employees are now subject to many onerous charges in England, such as the income tax, (deducted from the clerk hire,) life insurance, superannuation fund, medical, widows, death funds, &c. The plan for general protection against clerk speculation is becoming quite general in England, extending, now, to banks and other corporations. But to the writer's suggestions:—"I know many clerks, the total amount of whose payments to the guaranty society would not only surprise shareholders, but would also prove a handsome deposit in a bank. In my own case, I have been paying between £7 and £8 per annum. For such payments, clerks receive, virtually, no return; it is all outgoing, and the amount is irrevocably sunk. Boards of directors and staffs of officials are maintained, and dividends paid, however, out of these premiums. The insurance of the honesty of railway officials must, therefore, prove a profitable business. After covering all losses, what a large portion of the premiums must be expended in those things which are certainly avoidable, and not essential to the end aimed at. If it be possible, then, for clerks to form a fund which shall be satisfactory to their employers, why should they permit, as they are now doing, large undertakings to grow and flourish out of the premiums deducted from their salaries? It would seem that the matter only requires a little friendly and intelligent co-operation, and the kindly aid of leading officers, to be brought to a successful issue. The amount of the profits now being reaped by others would be immediately saved, and thus, by reducing the annual premiums, lead to the direct pecuniary gain of the assured. All moneys belonging to such a mutual society could, of course, be held and controlled by the directors of the several companies for the protection of the interests of shareholders, and, at the same time, in trust for the clerks. In many cases, the clerks' guaranty premiums are paid by the companies. In such cases, the directors have clearly an interest in furthering any economical arrangement. A clerks' guaranty fund would make every subscriber personally interested in the probity of his colleagues. In adverting to this subject recently, at the office of one of the guaranty societies, the secretary thereof argued that it would be dishonorable in railway men to attempt such a scheme as above proposed, on the ground of the heavy expenditure which had been incurred in the formation of such societies. This is, of course, fallacious. These societies can have no *locus standi* upon such a ground, any more than the older and more expensively constructed railways have a right to expect higher rates from the public than newer, more economically worked, and cheaper competing lines."

STATISTICS OF AGRICULTURE, &c.

COTTON IN INDIA.

A recent Parliamentary document furnishes some new views as to the productions of cotton in India. The leading point stated is, *that cotton can be cultivated once in three years only on the same land.*

Cotton is grown in large quantities in the Tipperah Hills ; it is likewise grown in the Dacca and neighboring districts, but not extensively. The soil is, no doubt, suited for producing the finest cotton. India has an abundant population ; and no production is better suited for the wives and families to be engaged in than cotton ; the soil, climate, and requisites for irrigation, when that is required, have only to be attended to, and the result must be, with rail and other means of transport, an abundant supply of the finest cotton, and at a lower price produced than from any other part of the world. The chances are, that cotton may be produced more cheaply in India than in the United States. Whilst a man is paid a dollar a day in America, with slave labor, in India he gets 2d. or 3d. a day. There is an ample supply of labor for collecting a largely increased cultivation of cotton. The present cost of cultivation is only 8s. per acre ; and for crops more highly cultivated, it would not exceed 16s. for labor and seed. Cotton, quite equal to the average of American, might be delivered at a seaport, from any part of India, at a cost of 1½d. per lb. But this low cost of production would not much affect prices in Liverpool, till India cotton is produced in sufficient quantity. To reduce prices in Liverpool, 2,000,000 bales in excess of the present supply, are wanted from India ; and to produce this quantity, by the present method of cultivation, would require an extra 42,000,000 acres of land, allowing a crop of cotton from it once in 3 years, and an extra 4,000,000 or 5,000,000 of laborers. In the opinion of Mr. WARDEN, however, cotton in India, though it may be much improved, can never be brought to equal American cotton. The seed itself degenerates. The uncertainty of the market is one obstacle to the growth of cotton in India. Major WINGATE stated that, although cotton may be extensively cultivated in India, a sufficient quantity cannot at any time be relied upon to make this country independent of American cotton. The production of cotton in India is determined entirely by the price. With a short crop in America the price rises ; and if the price of cotton in the markets of the world falls, then the cultivation of cotton in India is immediately contracted. Cotton can only be cultivated once in three years, advantageously on the same land. In most soils, where land is allowed to be fallow, a rotation of crops is not, however, largely practiced.

Major-General TREMENER thought it desirable that the European should purchase his cotton and look after its production and packing and cleaning. The effect of irrigation on the cotton plant, is to raise it from a small stunted plant, producing 50 or 60 lbs. of clean cotton per acre, to a large perennial plant, producing 500 or 600 lbs. of cotton to the acre, quite equal in quality to anything produced in America, and worth 150 per cent more than the present native field-grown cotton. In South Mahratta the cotton plant is an annual, the seed is sown towards the end of the monsoon, when the ground is full of moist-

ure; the bush seldom exceeds three-and-a-half feet in height, and forty pounds per acre of cleaned cotton is considered a fair crop. After the cotton is collected, the bushes are pulled up and burnt, as they all die during the hot weather from want of moisture. By irrigating cotton, the same bushes are retained for years. In quality and quantity irrigated cotton is considerably better than field-cultivated cotton. A great obstruction to the cultivation of cotton is the want of means of transit. When railways penetrate the interior of India in any direction, the cost of transport to the seaboard will be so much reduced as to enable supplies to be contributed by districts which are now beyond the reach of the market. In Lower and Eastern Bengal the main difficulty of cultivation is on the score of inland transport. The land and water carriage is about equal to the value of the article. Cotton is grown in large quantities in Tipperah Hills and near Dacca. The experimental farm at Dacca, however, proved a decided failure. One year they wanted seed; another year they wanted money; another year a blight came over it; another year a hail-storm came, and at last came a season of caterpillars. Considerable quantities of New Orleans cotton are grown in the Dharwar and in the South Mahratta countries. In Guzerat, great quantities of cotton might be produced at low prices. But in the Jroach district, government spent large sums of money in an experimental farm which proved a decided failure. Cotton is extensively grown in Khandeish, and in Mysore Mr. MANGLES stated that the East India Company have been unjustly vilified on the score of the cultivation of cotton, and showed that they had gone to considerable expense in order to promote the cultivation of it. He argued that the system of land revenue and of land tenure was no more a hinderance to the profitable cultivation of cotton, than it is to that of indigo, jute, oil seeds, etc. European agency has never been properly supplied, although its wants are unquestionable, for the cultivation of cotton, and for seeing to the packing or screwing and transit. Mr. MANGLES expressed a doubt as to the use of irrigation in the cultivation of cotton.

CULTURE OF HEMP—USE, ETC.

Hemp is of great use in the arts and manufactures, furnishing thread, cloth, and cordage. The article bears a near analogy to flax, not only in form, but also in culture and use. The bark of the stalk, as in flax, is the chief object for which it is cultivated, but is coarser as well as stronger in the fiber than flax. When grown for seed it is a very exhaustive crop, but when pulled green it is considered as a cleaner of the ground. In Great Britain, its cultivation is not deemed profitable, so that notwithstanding the encouragement it has received from the government of that country, and the excellent quality of English hemp, it is but little grown there, except in a few districts. It grows well on strong soils, and hence on newly cleared lands. Soon after flowering, the male plants may be pulled, and the female plants allowed to remain some weeks longer, to mature the seed. These do not preserve their vitality longer than a year, owing to the large quantity of oil in them. The males are tied immediately in bundles, the roots cut off while fresh, the upper leaves also beaten off, and it is an eligible practice to immerse them in water, without delay, for rotting. The females, which are three times more numerous than males, should be pulled very carefully, without shaking or inclining the summits. The seed, when separated, should be

spread out and turned at intervals and exposed to a current of air; otherwise, they ferment.

The comparative value of different sorts of hemp, as it regards durability, is easily and speedily tested by any one, since nearly all kinds are very short lived when exposed to causes favorable to decay. The Manilla will last some four or five months, as used in the summer season upon our steamboats. The Sisal, which is often sold under the name of the former, will not last much more than half as long. The Russian hemp, when moist and warm, will lose its strength in about three weeks; the American water-rotted in two weeks, and the dew-rotted in from five to ten days. Different experiments, however, exhibit different results in respect to the durability and strength of the various kinds of hemp.

In Russia, hemp is assorted, according to its quality, into clean hemp or firsts, out-shot hemp or seconds, half-clean hemp or thirds, and hemp codilla. Of the first three sorts an immense amount is annually brought from the interior beyond Moscow, its quality very much depending on the region in which it is produced. That brought from Karatshev is the best; next to this, that produced in Beleo; hemp from Ysbatsk is considered inferior to the latter. As soon as the hemp is brought down in the spring, or in the course of the summer, it is selected and made up into bundles with great impartiality and exactness. A bundle of clean hemp weighs from fifty-five to sixty-five poods; a bundle of the out shot, forty-eight to fifty-five; and a bundle of half-clean, forty to forty-five—one pood being equivalent to thirty six pounds. The external marks of good hemp are, its being of an equal green color and free from spills; but its good quality is proved by the strength of the fiber, which should be fine, thin, and long. The first sort is quite clean and free from spills; the out-shot is less so; and the half-clean contains a greater portion of spills, and is moreover of mixed qualities and colors. The part separated, or picked out in cleaning hemp, is called codilla, and is generally made up in quite small bundles.

Manilla hemp, commonly called Manilla white rope, affords the material of the most valuable cordage which the indigenous products of the Archipelago yield. This is known under the name of Manilla rope, and is equally applicable to cables, and to standing or running rigging. Jute consists of the fibers of two plants, called the chonch and isbund, extensively cultivated in Bengal, and forming, in fact, the material of which gunny bags and gunny cloth are made. It comes into competition with flax, tow, and codilla, in the manufacture of stair and other carpets, bagging for cotton, and other goods, and such like fabrics, being thus extensively used. But jute is unsuitable for cordage and other articles into which hemp is manufactured, from its snapping when twisted, and rotting in water. The attention of practical men has been directed, for a considerable time past to the remarkable hemp-like qualities of the China grass. It is very strong and beautiful in the fiber, and a simple and efficacious mode has been devised for preparing it; this method depends chiefly on the solvent powers of a hot solution of carbonate of soda.

The process of rotting consists in the decomposition of the substance which envelops and unites the fibers, and, among the English producers, it is regarded as taking place much more rapidly in stagnant pools than in running water or extensive lakes, in warm weather than the reverse. The time requisite varies from five to fifteen days, even in stagnant water. The water in which hemp has

been rotted has a disagreeable odor and taste, proving fatal to fishes. When water is not at hand, hemp may be rotted in the open air by means of spreading it at night upon the green-sward, and heaping it together in the morning, before the sun's rays have much power. In wet weather, it may be left on the ground during the whole day; and should the nights be very dry, it is better to water it. This method is called *dew-rotting*, and is very tedious. Another method again, is by placing it in a pit, and covering it over with one foot of earth, after having watered it abundantly a single time; but even this method requires double the time of water. After being rotted and rapidly dried, it is ready for canting, beating, &c.

These processes vary considerably, however, in different places, and the general operation may be said to be one of no little nicety and hazard. Thus it will be influenced by the strength and vigor of the plant, the moisture or dryness of the season, the temperature of the air during the process, as well as the soil from which the plant was produced. If the operation is carried too far, not only the woody matter, but the fibers also, will be destroyed or injured—and if not far enough, it has generally been thought that the article will not dress; and thus, after a good crop has been produced, it may be much injured, if not spoiled, in the incipient stage of its manufacture.

Exceeding good huckabacks is made from hemp, for towels and common table-cloths. Low priced hempen cloths are quite suitable for wear by those who are engaged in the coarser kinds of labor, and the finer varieties of the fabric are sometimes very strong and warm. They possess this advantage over most descriptions of linen—that their color improves in wearing, while that of linen deteriorates. But the great consumption of hemp is in the manufacture of sail-cloth and cordage, for which purposes it is peculiarly fitted by the strength of its fiber. More than one hundred and eighty thousand pounds of rough hemp are used in the cordage of a first-rate man-of-war, including rigging and sails.

In rope making, the fibers of hemp which compose a rope seldom exceed in length three feet and a half, at an average. They must, therefore, be twined together so as to unite them into one—this union being effected by the mutual circumtorsion of the two fibers. If the compression thereby produced be too great, the strength of the fibers at points where they join will be diminished so that it becomes a matter of great consequence to give them only such a degree of twist as is essential to their union. The first part of the process of rope making by hand, is that of spinning the yarns or threads, which is done in manner analogous to that of ordinary spinning. The spinner carries a bundle of dressed hemp round his waist, the two ends of the bundle being assembled in front. Having drawn out a proper number of fibers with his hand, he twists them with his fingers, and fixing this twisted part to the hook of a whirl, which is driven by a wheel put in motion by an assistant, he walks backwards down the ropewalk, the twisted part always serving to draw out more fibers from the bundles round his waist.

The spinner takes care that the fibers are equally supplied, and that they always enter the twisted parts by their ends, and never by their middle. As soon as he has reached the termination of the walk, a second spinner takes the yarn off the whirl and gives it to another person to put upon a reel, while he himself attaches his own hemp to the whirl hook, and proceeds down the walk. When the per-

son at the reel begins to turn, the first spinner, who has completed his yarn, holds it firmly at the end, and advances slowly up the walk, while the reel is turning, keeping it equally tight all the way, till he reaches the reel, where he waits till the second spinner takes his yarn off the whirl-hook, and joins it to the end of that of the first spinner, in order that it may follow it on the reel.

The next part of the process previous to tarring, is that of warping the yarns, or stretching them all to one length, and also in putting a slight turn or twist into them. The third process is the tarring of the yarn. Sometimes the yarns are made to wind off one reel, and, having passed through a vessel of hot tar, are wound upon another, the superfluous tar being removed by causing the yarn to pass through a hole surrounded with spongy oakum; but the preferable method is thought to be to tar it in skeins or hanks, which are drawn by a capstan with a uniform motion through the tar kettle—great care being necessary in this process that the tar is neither boiling too fast or too slow. Yarn for cables requires more tar than for hauser-laid ropes; and for standing and running rigging, it requires merely to be well covered. The last part of the process is to lay the cordage. For this purpose two or more yarns are attached at one end to a hook. The hook is then turned the contrary way from the twist of the individual yarn, and thus forms what is called a strand. Three strands, sometimes four, besides a central one, are then stretched at length, and attached at one end to three contiguous but separate hooks, but at the other end to a single hook; the progress of the twists of the strands round their common axis is so regulated that the three strands receive separately at their opposite ends just as much twist as is taken out of them by their twisting the contrary way in the process of combination.

WHEAT PRODUCTION IN IOWA.

We find a communication in the *Bellevue Courier* which shows the wheat product of Jackson County for 1860 to be 627,024. The statement is founded upon reports made by reliable persons in every township but four; and from the four townships from which no report was obtained, the amount of their production is estimated from other data:—

Townships.	No. acres.	No. bushels.	Av. yield.
Van Buren.....	2,597	60,077	23 23.100
Iowa.....	2,210	49,250	22 28.100
Prairie Springs	2,400	43,279	18 3.100
Jackson.....	1,946	43,935	22 57.100
Farmers' Creek	940	25,028	26 62.100
Otter Creek	2,049	44,181	21 36.100
Tete des Morts.....	1,765	31,475	17 83.100
Maquoketa	1,319	29,245	22 17.100
Monmouth.....	867	20,825	24 2 100
Brandon	465	9,306	20
Fairfield	1,717	38,227	22 26.100
Union	382	8,729	22 85.100
Perry.....	1,853	38,807	21
South Fork.....	....	27,100	..
Richland.....	....	38,807	..
Butler.....	....	38,807	..
Washington .....	....	13,000	..
Bellevue.....	....	20,000	..
Add 1.10 to report of towns.....	....	46,946	..
Total estimated.....		627,024	

PUBLIC LANDS.

It appears from the annual report of the Commissioner of the General Land Office that the area of the several States and Territories of the United States is—

Square miles.....	3,010,370
Acres.....	1,926,636,800

To which added water surface, lakes, rivers, etc., we have a surface of over 3,250,000 square miles.

Pursuant to executive orders there have been proclaimed for sale during the five quarters ending September 30, 1860, 16,385,361 acres, and during the past month, viz. : under date 22d October, 1860, in California, 3,685,287 acres.

By acts of Congress of 1856 and 1857 grants were made to eight States to aid in the construction of forty-five railroads, as follows :—

Iowa.....acres	2,481,541	Michigan.....acres	957,666
Alabama.....	1,868,275	Mississippi.....	171,550
Florida.....	1,759,160	Minnesota.....	581,904
Louisiana.....	995,845		
Wisconsin.....	211,068	Total.....	8,977,004

SUMMARY OF OPERATIONS FROM MARCH 1, 1857, TO SEPTEMBER 30, 1860.

Public lands and private claims surveyed.....acres	54,013,555
Quantity sold for cash.....	14,347,887
Purchase money.....	\$9,160,777 86
Located and bounty land warrants.....	15,575,962
Certified under railroad grants.....	8,977,004
Approved to States under swamp lands.....	5,482,268
Embraced by surveys returned for confirmed private claims in California.....	3,101,223
Total.....	47,484,339

These land sales are embraced in 171,211 certificates of purchase.

AGRICULTURE IN SOUTH AUSTRALIA.

The Colonial Government *Gazette* publishes an extract of the agricultural statistics of the last season, but the detailed tabular statements have not yet been issued. It appears that the total number of acres under cultivation in the colony last season, inclusive of 50,266 acres in fallow, was 361,884½ acres, showing an increase in the land crop, as compared with the previous year, of 39,445½ acres. The area on which wheat crops were grown was 218,216 acres, and the total yield was 2,103,411 bushels; being an increase over the previous year of area to the extent of 29,513 acres, but a decrease in the total amount produced of 6,133 bushels. It follows, of course, that the average yield of wheat at the last harvest must have been miserably small; it is stated in the abstract before us at 9 bushels 36 pounds. In barley there has been a falling off in both area and yield, as compared with the previous year, to the extent of 986 acres and 64,822 bushels. The average yield of barley is stated at 12 bushels 44 pounds. In oats there has been a decrease, amounting to 76½ acres and 528 bushels. In potatoes there has been an increase of cultivation, with a decrease of produce—570 acres in excess of the breadth of the previous year having been put under crop, while the yield fell short of the previous year, by 4,323½ tons. Hay stands in the same position, the area under crop having been increased by 9,291½ acres, and the produce having fallen short by 2,798½ tons.

STATISTICS OF POPULATION, &c.

MILITIA FORCE OF THE UNITED STATES.

The following is an abstract of the United States militia, from the Army Register* :—

	Year.	Officers.	Men.	Total.
Alabama.....	1851	2,882	78,880	76,662
Arkansas.....	1854	1,132	84,922	36,064
California.....	1857	330	207,400	207,780
Connecticut.....	1858	298	51,312	51,606
Delaware.....	1857	447	8,782	9,229
Florida.....	1845	620	11,502	12,122
Georgia.....	1850	5,050	78,649	78,699
Illinois.....	1855	....	....	257,420
Indiana.....	1832	2,861	51,052	53,913
Kentucky.....	1852	4,870	84,109	88,979
Louisiana.....	1858	2,788	88,496	91,284
Maine.....	1856	304	73,249	73,552
Maryland.....	1838	2,397	44,467	46,864
Massachusetts.....	1860	608	153,956	155,389
Michigan.....	1854	2,888	94,236	97,094
Minnesota.....	1851	7	1,996	2,003
Mississippi.....	1838	825	35,259	38,084
Missouri.....	1853	88	117,959	118,047
New Hampshire.....	1854	1,227	32,311	33,538
New Jersey.....	1852	....	....	81,934
New York.....	1860	7,338	454,000	469,430
North Carolina.....	1845	4,267	75,181	79,484
Ohio.....	1845	2,051	174,404	176,455
Pennsylvania.....	1855	....	....	147,973
Rhode Island.....	1858	156	16,555	16,711
South Carolina.....	1856	2,599	33,473	36,072
Tennessee.....	1840	3,607	67,645	71,252
Texas.....	1847	1,248	18,518	19,766
Vermont.....	1843	1,088	22,827	23,915
Virginia.....	1858	....	....	150,000
Wisconsin.....	1855	1,142	50,179	51,321
District of Columbia.....	1852	226	7,975	8,201
Utah Territory.....	1853	285	2,536	2,281
Total.....		53,589	2,036,520	2,862,614

GROWTH OF NEW ORLEANS.

In 1810 the total population of the city was 17,242. The census for 1820 gives a population of 27,176. In 1830 the returns show 46,310 inhabitants. In 1840 we had a population of 102,193. The census of 1850 gives us 116,375 souls, and that for 1860 swells the number up to 170,766. With the single exception of the period from 1840 to 1850, the growth of New Orleans has not, since 1810, fallen below 46 per cent in ten years, and its increase during the last decade is nearly in the ratio of the growth of New York, and above that of Philadelphia and Boston for the same period.

* No returns from Iowa and Oregon, and the Territories of New Mexico, Washington, Kansas, and Nebraska.

CENSUS STATISTICS OF MARYLAND.

The following table will show the census returns of the State of Maryland, together with the comparisons of the census which was taken in 1860. It will be observed that, as far as Baltimore city and Howard County are concerned, there cannot be any comparison made, for the reason that the returns of the seventh census made an aggregate of both Baltimore city and county, and since that time Howard County was established by an act of the General Assembly of the State, being formed from sections of Anne Arundel and Baltimore Counties :—

Counties.	Free inhabitants.*		—Slaves.—		—Deaths—		—Dwellings—	
	1860.	1850.	1860.	1850.	1860.	1850.	1860.	1850.
Alleghany.....	28,680	21,633	844	724	500	150	4,534	3,850
Anne Arundel....	16,179	16,542	7,870	11,249	143	496	2,984	3,712
Baltimore... ..	51,450	.....	3,170	.....	650	...	18,829	.....
Calvert... ..	6,839	3,680	4,513	4,486	205	91	1,116	1,006
Caroline.....	10,409	6,096	739	808	39	76	1,865	1,526
Carroll.....	28,559	18,667	802	975	203	168	4,455	3,467
Cecil.....	22,391	15,472	951	844	240	229	4,114	3,056
Charles.....	6,846	5,655	9,613	9,584	260	293	1,392	1,335
Dorchester.....	16,204	10,747	4,123	4,282	132	187	3,178	2,706
Frederick.....	43,631	33,314	3,248	3,913	332	581	7,627	6,397
Harford.....	21,747	14,413	1,813	2,166	365	246	8,998	2,977
Kent.....	10,781	5,616	2,563	2,627	118	127	1,892	1,584
Montgomery.....	13,035	9,435	5,363	5,114	260	287	1,301	1,023
Prince George's...	10,856	8,901	11,656	11,610	222	449	2,029	1,875
Queen Anne's	11,817	6,936	4,177	4,270	161	324	2,084	1,864
St. Mary's	8,684	6,223	6,550	5,842	193	270	1,851	1,512
Somerset	19,976	13,885	5,097	5,588	173	526	3,452	3,158
Talbot.....	11,077	7,084	3,756	4,134	246	240	2,024	1,751
Washington	23,122	26,930	1,126	2,090	214	359	5,233	5,052
Worcester	16,555	13,401	3,602	3,444	162	246	3,161	2,884
Howard	10,521	.....	2,894	.....	154	...	1,802	...
Baltimore city....	211,324	174,853	3,213	6,718	2,583	4,286	33,151	30,065
Total.....	646,283	492,666	85,382	90,368	.....	.....	105,567	81,708

It will be perceived that the increase of population in the State for the last ten years is 148,531. The decrease in the number of slaves is 4,986; decrease of deaths, 3,224, and the increase in the number of dwellings 23,859. It is worthy of remark that the above returns are complete, and compiled from the official returns, with the exception of Alleghany County, in which several small precincts in the mountain region of the county are yet to hear from. The total amount of the population in the State is 731,565, whilst that of the year 1850 was 583,034.

In 1850 the State had 90,368 slaves, and, as the number now is 85,382, the decrease is 4,986. The decennial movement of population in Maryland, since the year 1790, is shown by the following figures :—

Years.	Whites.	Slaves.	Total.
1790.....	216,692	103,036	319,728
1800.....	235,913	105,635	341,548
1810.....	269,084	111,502	380,586
1820.....	299,952	107,398	407,350
1830.....	344,046	102,994	447,040
1840.....	380,812	89,737	470,049
1850.....	492,666	90,368	583,034
1860.....	646,283	85,382	731,665

POPULATION OF CHARLESTON.

By these tables it will be seen that since 1850 the increase of white inhabitants has been 3,315, while the number of slaves has decreased 3,926 within the same period; the free colored having also decreased 184. It will be borne in mind, says the *Charleston Mercury*, that the recent census was taken during the period that there was an unusual absence of our citizens, in their annual migration to the Northern and other summer resorts. The larger relative increase of the Upper as compared with the Lower Wards is to be partly ascribed to the fact that the augmentation being largest of the working classes, cheaper rents, in a class of houses for which there was abundant room in the suburbs, has had much to do in producing the difference :—

POPULATION OF THE CITY OF CHARLESTON ACCORDING TO THE CENSUS OF 1860.

Wards.	White.	Free col'd.	Slaves.	Total.	Wards.	White.	Free col'd.	Slaves.	Total.
1....	2,397	79	1,120	3,596	6....	3,428	765	2,000	6,193
2....	2,049	99	2,727	4,875	7....	1,880	160	534	2,579
3....	3,854	238	1,648	5,740	8....	2,495	501	879	3,875
4....	4,685	728	3,258	8,666					
5....	2,589	687	1,445	4,671	Total	23,327	3,257	13,606	40,195

CENSUS OF 1850.

Ward.	White.	Free col'd.	Slaves.	Total.	Neck	White.	Free col'd.	Slaves.	Total.
1....	2,807	165	2,446	5,418		4,570	1,442	4,848	10,852
2....	2,750	319	3,209	6,278					
3....	4,386	518	3,241	8,148	Total	20,012	3,441	19,532	42,985
4....	5,499	997	5,796	12,292					

WESTERN POPULATION.

Mississippi returns a population of 783,715, being an increase of 187,189 in ten years. This is rather more than the population of Wisconsin, which foots up at 777,771. Mississippi was admitted as a State in 1817, having been first settled in 1698. Wisconsin was admitted in 1848, and first settled, like Mississippi, in the latter part of the 17th century. The progress of the two States compare thus :—

Year.	Mississippi.	Year.	Wisconsin
1800.....	8,850	1836.....	11,683
1810.....	40,352	1840.....	30,945
1820.....	75,448	1842.....	44,478
1830.....	136,621	1846.....	155,277
1840.....	375,651	1847.....	210,546
1850.....	606,526	1850.....	305,391
1860.....	783,715	1860.....	777,771

MINNESOTA.

The following is the summing up of the marshal of the census of Minnesota :

Total population.....	175,525
Number of farms.....	19,035
Number of manufacturing establishments.....	563
Number of deaths.....	1,295

The total area of Minnesota is estimated at 81,159 square miles, so the population of the State on the 1st of June, 1860, was a little over two persons to the square mile.

CONNECTICUT.

The following table gives a summary of the new census as complete as practicable, and will interest the public :—

Counties.	1840.	1850.	Gain.	1860.	Gain.
Hartford.....	55,629	69,957	14,328	90,065	20,108
New Haven.....	48,619	65,598	16,969	97,462	31,874
New London.....	44,463	51,812	7,349	61,832	10,020
Fairfield.....	49,917	59,775	9,858	77,685	17,910
Windham.....	28,080	31,081	3,001	34,618	3,537
Litchfield.....	40,448	35,258	4,805	47,866	2,618
Middlesex.....	24,879	27,216	2,337	31,086	3,870
Tolland.....	17,980	20,091	2,111	21,224	1,133
Total.....	210,015	370,782	60,755	461,838	91,065

The gain for the last ten years is greater than for fifty years, from 1790 to 1840.

ORDER OF ODDFELLOWS.

At a meeting of the Order, Mr. KIDDER gave some interesting statistics of their progress during the past thirty years, from which we glean the following :—

	1830.	1838.	1860.	Aggregate.
Number of Lodges.....	58	114	3,548	3,548
Initiations.....	1,598	2,006	16,980	408,680
Members.....	3,086	8,175	173,818	.....
Revenue.....	\$15,727 48	\$47,181 04	\$1,260,904 03	\$19,345,841 92
Brothers relieved.....	.....	231	16,276	824,726
Widowed families relieved..	.....	28	2,629	85,350
Deaths.....	.....	15	1,597	24,211
Paid for relief.....	.....	\$4,505 55	\$548,746 95	\$7,202,374 87
“ educating orphans.....	.....	815 92	12,692 07	165,808 87
“ burying dead.....	.....	617 85	59,754 83	1,208,349 95
Aggregate amount relief....	.....	5,440 81	621,193 90	8,478,528 41

The system of benefits went into effect in 1838. The aggregate of benefits above given is consequently for only twenty-three years.

The aggregate amount of relief is exclusive of special applications for assistance from widows and non-affiliated brethren, and of contributions made outside the Order by Lodges during the prevalence of cholera and yellow fever, which have been very considerable.

NORTH CAROLINA CENSUS.

The following is a statement of the population by the census of 1860, as compared with that of 1850. The free colored for 1860 is included under the general heading of free :—

	Free.	Slaves.	Free colored.	Total.	Federal pop.
1860.....	687,830	339,867	.....	1,027,197	891,250
1850.....	553,028	288,548	27,463	869,039	753,619

IMMIGRATION TO THE UNITED STATES.

There is a considerable increase in the immigration of the past year, the total number being put down at 103,621, distributed as follows :—New York, 44,000 ; Pennsylvania and New Jersey, 14,000 ; New England, 12,000 ; Southern States, 4,000 ; Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa, Minnesota, and California, 20,000 ; Kansas, Nebraska, New Mexico, and Canada, 10,000.

MERCANTILE MISCELLANIES.

RISE AND PROGRESS OF AMERICAN COMMERCE.

Before entering upon the regular study of the question, we would say a few words relative to the national marine or navy of the United States, which if it was to us, as to other nations—a cumbersome excrescence—we should pass over in silence. But it must be taken into consideration from the day that the worm-eaten barriers, which separated nationalities, crumbled beneath the breath of intelligent fraternity; from the day on which the American Republic ceased to be subject to a jealous, malevolent European power, we shall endeavor to prove, in a few words, that this country is not so weak in maritime or naval power as they would make us. In spite of the just aversion manifested by the American people to a large and expensive standing army and navy, we must remember that we should not leave without the means of defence our vast sea coast, which is but too accessible to our neighbors who may become our enemies.

In the month of January, 1855, our navy consisted of eleven ships-of-the-line, thirteen frigates, nineteen sloops, three brigs, two schooners, five vessels serving as store-ships, and twenty-four steamers of war; add to this some half a dozen steam frigates. Of these, there are now thirty-two vessels in commission, employing in the entire naval service four thousand five hundred men.

What is this small number of ships and men, when compared with the mammoth fleets of England or France? The British navy consisted, in the same year, of five hundred and forty-four frigates and sloops-of-war, one hundred and fifty small vessels, ninety-four ships-of-the-line, and seventy-two gun boats—requiring one hundred and fifty thousand men! Now, would it not appear absurd to suppose that our small navy could cope with the enormous one of England? Yet in the war of 1812 it was proven that it is not sufficient to have the superiority of numbers to bear off the victory. We have a maritime force in our merchant-ships, which are at all times ready to be employed in their country's service; for which their superior construction, their solidity and swiftness, admirably fits them. The facilities for building, and the dispatch with which any number of ships can be built, launched, and fitted out, gives us advantages which other nations do not enjoy. The Missouri and Mississippi made on their trial trip, on the Delaware, nearly twenty-four miles per hour. But our ships-of-war have proven their superiority over those of equal rate, belonging to other nations. One of our seventy-four gun ships is equal to a ship of one hundred guns of the British or French navy, as our ships carry more instead of less gun than their rate, and heavier metal than European vessels of the same class. The British are perfectly well aware of this fact; for in the *London Times*, of the 29th of March, 1856, the following remarks appeared:—"We have observed that an American line-of-battle-ship excites the admiration of all observers for her number of guns, weight of metal, sailing qualities, and enormous armament. They carry, together with heavy guns, twenty-two seventy-four pounders! Our government would, perhaps, do well to profit by the example, and arm our line-of-battle-ships in the same manner. In the last war with America we were

generally beaten, more by their weight of metal, than from any lack of skill or courage on our part." Certainly the writer of the above placed his thumb on one of the causes of the numerous defeats experienced by the British fleet in the last war with this country. He might have attributed our victories, in a great measure, to the superiority of the American commodores—to the skill, intrepidity, and bravery of our PERRY, CHAUNCEY, DECATUR, and others. These illustrious seamen proved by their success that the victory does not depend upon the grade of the commander, and that the republicans of the Union in interdicting the grade of admiral in their national marine, did not rob it of any of its strength or its superiority. It matters little whether the officer who leads our navies to battle be called commodore or admiral. The officer who directs a fleet should be chosen from among the most able, and not from among those who have the greatest interest at Washington. The triumphs of our navy in the war of 1812, at a time when our Republic might be said to be but in its infancy, gave ample scope for the hope that the emblem of our freedom—the glorious flag of a free people, will never be lowered without being gallantly defended. During that campaign of three years, against the greatest power of Europe, then in the plenitude of her power, it was our lot, almost invariably, to encounter them under the disadvantage as to numerical force; and it required no small degree of ability and courage to triumph over the British sailor, and to call forth the following tribute of praise from even the enemy with whom we were at war:—"I fully and voluntarily give to Americans my humble tribute of praise for the ability and the courage of their officers and seamen. All nations can, perhaps, furnish men of equal skill and courage, equally capable of those magnanimous and chivalrous actions, which bespeak a great and free people; but the military courage that has been made manifest during the short period of American history, only shows that that people are not inferior to any on the face of the earth!" It is, above all, in our patriotism, in the sentiment of liberty, that we depend; upon the love of liberty and our country that we place our chief reliance in the hour of danger. It is this which would, in a case of necessity, enable us to launch in a single month a thousand ships—*intrepid privateers*, the terror of our enemies—of foreign merchantmen. The powers of Europe are well aware that our naval strength lies in our merchant ships; hence their earnest desire that Mr. MARCY should strictly adhere to the treaty of 15th of April, 1845, and renounce the natural right of war—to arm letters of mark. This was fortunately refused, because the right of neutrality was not guaranteed inviolate; and because our maxim, "free ships make free goods," "the ships being neutral render the merchandise neutral," was not adopted by the governments of Europe, and hence we remain doubly armed—with a small but well equipped, well managed, and well commanded navy, the largest mercantile marine in the world, the smallest schooner of which can within a month be transformed into a formidable corsair! All that is required is that which our floating schools are calculated to supply—an adequate number of able American seamen.

STICK TO YOUR OWN BUSINESS.

It is not peculiar to this country, says the *Boston Journal*, to "run everything into the ground," as the phrase goes, but it certainly is done to a greater ex-

tent, and with more rapidity here than elsewhere. No matter what branch of business may be established—anything, from the growing of potatoes to the manufacture of gold watches; from the cutting of timber in the forest, to the manufacture of ships and houses; for trade to the Isle of Shoals, to voyages to the extremes of the earth—anything and everything which has the credit of being profitable, is rushed into by all sorts of people, till the tables are fairly turned, and great losses follow great profits. Without going back many years, we have twice seen the lumbering business in Maine, from a state of ordinary activity, which left a handsome profit to those engaged in it, swelled up—prices raised—lands changing hands at rapidly rising rates, thousands of people rushing into it who did not know hemlock from maple, and twice collapsed, to the infinite damage of all concerned. Twice have we seen ship-building in New England carried to the same extremes. Men did not know a schooner from a ship, taking up their investments in stocks and mortgages, even borrowing money on accommodation paper, in their haste to share in the fabulous profits to be made by navigation, with the same results. So of all other kinds of business, our readers can readily recall without our aid, the ups and downs that have taken place within twenty years, and it is safe to say that in all our pursuits, there has not been one of any note which has not within that time been “run into the ground.” All these failures are the result of enterprise, doubtless, but of a very poor sort of enterprise, which depends upon the judgment of others, and follows the lead, without question, of whoever says, “I have made money.” It is safe, therefore, to predicate of any business, that when it pays large profits, its race, as a *profitable* business, will speedily be run—so may many who strike in speedily, while the late comers will not only ruin themselves, but cut down the profits of their predecessors to a point so fine, as to leave them merely nominal, if not worse. Another disadvantage of this course of things is, that credit is thereby expanded to a serious extent, because men who embark in a business which has the reputation of being profitable are not much scrutinized. “He is in the shoe business—everybody is making money at that—of course his note is good.” Or, “He is in the book trade; see how many men have got rich in it; why should not he?” Or, “He owns a ship, and a ship in these times is a fortune to any man.” And so the new shoe-man, or book-man, or ship-owner, if he has sense enough to look wise, and modestly admits, when pressed to it, that “his business is really not a bad one,” will soon get a line of credit far beyond his real deserts, spread himself on it, compete sharply for business, sell without profit, trust others as freely as others trust him, and finally collapses—an empty shell being left where his creditors all along believed in a full egg. As a general rule, these collapses happen to the latest comers, for the reason that the old established concerns in any trade are able to make the two ends meet, where the new ones will lose ten per cent. But the result is the same, namely, to bring the business into discredit, as well as destroy for a time all the profits of it. We have seen the time when the book-trade notes were looked upon with anything but favor; when shoe-and-leather paper, even with large rates of exchange, did not tempt shrewd bankers; when to be known as a large owner of ships was withering to a man’s credit.

The misfortunes we have spoken of arise from the eager, restless, money-getting spirit which is never satisfied with small things, but is ever on the watch

for some opening which promises a fortune speedily, and rushes into whatever other people appear to be getting rich by, in too many cases without the slightest knowledge of the business itself. Those who are brought up to a business—who know all about it—should never leave it for something which looks better. By sticking to what they know they will generally get a living—sometimes get rich; by rushing into something new, they will learn too late for remedy that they have lost the bone and have not seized the shadow even. The man who knows all about a ship, from the keel up, who understands all her wants, and the cheapest way to supply them, will make a living profit, while the amateur, who only knows what others tell him, will lose. The foreign trader, who knows exactly the wants of the market to which he sends his ships, will succeed; while another who gets his information from the prices-current, and general information which is open to everybody, will fail. So in any other business. Let every one stick to what he knows. By following this rule a man will oftentimes find himself far astern, apparently, of his more adventurous neighbors; but in nine cases out of ten, at the end of thirty years he will look back from the safe position he occupies, upon the wrecks of those same adventurers all along the road. Stick to the occupation, trade, or business, that you know all about.

LIES IN TRADE.

Men of scrupulous veracity in the common relations of life often justify themselves in deceptions of trade by the plea that such deceptions are common, and it is only by shrewdness that one can hope for eminent success. But lying is lying everywhere, and every man is forbidden to follow the multitude in doing evil. The *British Mercantile Courier* says that it is a vulgar fallacy that lies are lies only when spoken. Some persons even assume that lies are not lies if uttered to push the sale of merchandise—at least, that they are only “white lies.” The essence of a lie consists in the attempt to deceive—in making a false representation. Whatever be the motive, if it involves deception, it is a breach of the moral law.

There can be no doubt that the shopman who asserts that a print will wash when he knows it will not utters a deliberate lie. If he make the assertion with mental reservation that “all the color will vanish in the process” it is still a lie, and even if he is doubtful on the point it is equally so, because he attempts to make an impression on the mind of his customer that may be adverse to the truth. The tickets with figures and hair-like strokes, too often exhibited in windows—the calling “Hoyle’s” prints which are not Hoyle’s, and flannels “real Welch” which are not real Welch, and such like, are lies of too gross a character to require one word of comment.

Concealment of truth comes under the same category of lying. The publisher who appends critical notices of reviewers to his list of books, leaving out qualifying passages, lies. So does the shopman who purposely conceals defects—the manufacturer who sends a 34 inch cloth for what is usually 36 inches wide, and the shoemaker who supplies Northampton made for “bespoke” boots.

The sale of adulterated goods or articles, with false labels, must be condemned by all as unadulterated lying; but it is said by some, whose moral perceptions are not very clear, that to label a 200-yard reel of cotton “Warranted 300 yards” is not wrong, because it is generally understood not to measure what it

is called. Then, why is it done? Why not label it 200 yards, which is the truth? Simply because there are those who do not understand it, and, placing reliance on the dealers, purchase it for what it is called. Lies consist not in the verbal utterance, but in the idea they intend to convey. The footman who says that his mistress is "not at home," although he utters a verbal falsehood, is not really guilty of lying, for it is a mere polite form of expressing her wish not to be seen, and is recognized in high life as such. It is, however, an immoral custom, as it familiarizes the servant to tampering with truth.

It is possible also to speak verbal truth which is substantially a lie. Horrocks is an eminent manufacturer of calicos. Another man of the same name might start a manufactory of similar goods, but of an inferior quality; and the tradesman who assured his customers that a roll of his calico was of Horrocks' make, would be uttering a lie, which, at the same time, would be verbally true, his intention being to impress the buyer with the idea that it was from the looms of the famous Horrocks—the Horrocks *par excellence*.

Lies may be acted as well as spoken. The wearing of imitation jewelry is a lie; the physician who directs his servant to call him out of church in the middle of the sermon acts a lie—so does the grocer who has his cart emblazoned with his name driven hither and thither, without any other object than to lead his neighbors to imagine he is doing a large trade. and the draper who tickets goods in his windows at fabulously low prices, to induce the supposition that all his wares are sold at similar prices. Indeed, in trade, there are more lies acted than spoken. Placing the best fruit on the top of the basket—turning in the end of a dirty piece of goods—displaying an article in a fictitious light—placing packages outside the door addressed with aristocratic names—and a thousand other false actions which might be cited, are all acted violations of the truth, and although they are looked upon by the commercial world as very venal peccadilloes, are really as much lying as the most deliberate verbal falsehoods; and so long as this systematic deceptiveness characterizes the English tradesman the sneer which the First Napoleon threw in our teeth, that we were a "nation of shop keepers," possesses a sting which, without that, would be indicative of our greatest national glory—to wit, universal national industry.

CHINESE PROVERBS.

Plant a flower with care, and it may not grow; stick in a willow at random, and it forms a thick shade.

Old age is like a candle in the wind—easily blown out.

To show the value of secrecy, an emperor made a statue of gold with its mouth closed.

Love of gain turns wise men into fools.

He who has many acquaintances will be mixed up with many troubles.

To be over-prudent is not much better than folly.

A scholar's children are familiar with books; a farmer's sons are versed in the seasons.

Wife, fortune, children, and profession, are all predestined.

A wife should excel in four things—virtue, speech, person, and needlework.

High trees feel the wind; lofty station is obnoxious to danger.

A certain sage feared the testimony of four witnesses—heaven, earth, his neighbor, and himself.

To contrive is man's part ; to accomplish is heaven's.

Those above should not oppress those below.

He who could see only three days into futurity might enrich himself forever.

If a chattering bird be not placed in the mouth, vexation will not sit between the eyebrows.

To be fully fed, and warmly clothed, and to dwell at ease without learning, is little better than a bestial state.

Prosperity produces liberality and moderation of temper.

An illiterate person is like a dry inkstone ; turn it upside down, not a drop of ink comes from it.

A good rat will not injure the grain near its own hole. (It is an ill bird, &c.)

Think how you can sell a thing before buying it.

Produce much, consume little, labor diligently, spend cautiously—the way to get rich.

To persecute the unfortunate, is like throwing stones on one fallen into a well.

He who has a yellow face and white teeth is an opium smoker.

When paths are constantly trodden they are kept clean ; but when abandoned the weeds choke them up, so weeds choke the mind in the absence of employment.

CREDIT.

We like the prompt, energetic individual who is always on time, who drives his business, and never allows it to drive him. If a little more of the prompt activity of some men could be infused into the masses, the wheels of business would never be clogged, and no stagnation would ever be felt in the ever-moving waters of stirring, active industry. Engagements would be met at the minute, and no delay would ever hamper the projects of him who is bound to succeed, because everything is done at just the right moment. There is no end to the confusion which may ensue, when one fails to be present at a specified time, and what may seem a mere trifle to the individual, who thinks that one minute can be of no possible importance, may be traced through its successive consequences, and in the end the aggregate damage to those who have been compelled to wait only a minute will be astounding ; and the thoughtless cause of the whole disturbance, if he could behold the results of his carelessness, would be overwhelmed with confusion. There are many who do not realize that time is money, that minutes make hours, and that hours wasted can never be recalled. Such persons can have no excuse for their conduct, and if they find others outstripping them in worldly prosperity, they must attribute their own failure to thoughtlessness, and ought not to charge upon ill-fortune the results of their own lack of promptness. It is better to be ten minutes before the time than one instant behind ; and if such were made a general rule by all, none would be subjected to the disappointment of seeing the steamboat plank hauled in just as they were about to set foot upon it, and the cars would never be seen whirling out of one end of the depot just as the tardy passenger enters the other. One minute behind time, and the bank will be closed, notes will go to protest, and misfortunes in business will follow, which will require months to remedy. Delays, too, are

dangerous, and the lack of courage to undertake what may sometimes appear hazardous and uncertain, in the case of one who is not prompt to see and use the favorable moment, affords the opportunity to the energetic, go-ahead man to carve out for himself a long-coveted fortune. While one should ever bear in mind the rule which we have before mentioned, we would not advise him to waste time by unnecessary haste, and it should ever be remembered that time may be wasted by being too soon as well as by being too late. All our affairs should be so regulated that by making a reasonable allowance for unforeseen delays, and a difference of watches, not a minute shall be unprofitably employed. By so doing we shall be surprised at the amount of work which will be accomplished, and our systematic employment of time will be productive of much personal success, and we shall thereby contribute our share in the general progress of the world.

The man who is noted for promptness of character inspires all with whom he may have dealings with confidence, and the community learns to look up to him for example. If anything relating to the public weal is to be undertaken, he is to be consulted, and his advice is deemed of the utmost importance. Is any thing requiring skill and energy to be accomplished, he is the one to be entrusted with its management and direction, for the people *know* that whatever he undertakes will be done *promptly*, at exactly the right time, and when it is done it will be done. Nothing will fail in his hands for want of decision or through procrastination, which is the thief of time. Think of this, ye loiterers, and remember that you owe the world something, and that time and tide wait for no man. In this active, stirring country of ours there is no room for the lazy, prodigal spendthrift of time, and he who sees the boat leave him behind, or hears the train thundering out of the depot without him, must not complain of his ill-luck, but must remember that the world cannot afford to wait for him, and if he wishes to be in the first rank, he must be up and dressed, ready at the instant, and setting this good example to others he will reap the fruits which they may find sometimes snatched from their grasp, and the glittering prize which another more prompt might win, will never be seen borne away just at the moment it is ready to be caught in hand.

"SAVE IT IN SOMETHING ELSE."

It is an every-day expression, with people about to indulge in a questionable expense, "Oh! it won't cost much after all, and we can 'save it in something else.'" There are hundreds of households where these or similar words have been used this very day. Does a husband wish one costly delicacy for his dinner, which his careful wife thinks they cannot afford, he quiets her scruples or forces her to deny herself what is positively needful, by telling her she "can save it in something else." Is a wife determined to outshine her neighbors in a dress? she passes lightly over her extravagances in milliners and mantua-makers, by assuring her husband volubly that she can "save it in something else." Does a man who can ill afford it, buy a fast trotter? he is sure to inform you that he can "save it in something else." Is a woman bent on giving an extravagant party? she has her answer ready, "I can save it in something else." Rarely is a foolish expenditure entered on, an expenditure which is beyond a person's

means, than the reply is not made to the conscience, if not to others, "I can save it in something else."

In point of fact, however, the saving is never made. Those who are first to launch into extravagance are always the last to retrench. The habit of self-indulgence, which is the cause of yielding to one temptation, is continually in the way to prevent resisting others. Neither the husband, who cannot deny himself a good dinner, nor the wife, who is unable to resist the purchase of a costly dress, are the persons to "save it in something else." If the folly is remedied at all it is because the husband has a self-sacrificing wife, who deprives herself of comforts to keep the family from running into debt, or the wife has a patient, economical husband, who lives like a hermit, that she may dress like a duchess. Our experience of human nature has yet to furnish us with a solitary instance in which selfishness of this kind did not pervade the entire character. The saving is never anything which the guilty person likes. Those who insist on gratifying themselves, when they know they cannot afford it, do it invariably at the expense of others. From the husband who practically stints his wife, to the spendthrift who cheats everybody, his tailor included, those who talk of "saving it in something else," actually enjoy themselves at the cost of innocent parties.

There is but one road to economy. Without self-denial, nobody can avoid extravagance, for we all have something that we dearly wish for, and the desire to indulge ourselves is as powerful in one as in another. Virtue does not consist in never being tempted, but in successfully resisting temptation. Those who lament so loudly that they cannot be as economical as others, because they have what they call more elegant tastes, are simply more self-indulgent. Luxury is the same sweet singing syren to us all. A just man schools himself to resist her allurements, but a weak one abandons himself to her wiles. It is insulting the long, hard, severe discipline which habituates a man to self-denial, to tell him that he is lucky in being made of sterner stuff than others who cannot emulate him; for if those others would do battle as strongly and perseveringly with their foibles, would learn to go without the luxuries and elegances they cannot afford, they also would become of sterner stuff. The evil lies in ourselves always. "Oh! save it in something else" means "somebody else must save, for I will not," and is the type of a selfish nature. This is plain speaking; but it is truth.

COIN SALE IN PHILADELPHIA.

Extraordinary high prices for coins were realized at an auction sale recently held in Philadelphia. The following are some of the prices, showing the extreme rates:—A Martha Washington half-dime brought \$17; a Washington cent, small eagle, \$19 50; a Washington cent, different die, \$59; Liberty Cap cent of 1793, \$17 50; a cent of 1799, \$13; a cent of 1829, proof, \$10; a cent of 1831, proof, \$13; a half-cent of 1842, proof, \$23 50; a half-cent of 1844, proof, \$11 50; a half-cent of 1846, proof, \$10 75; an experimental piece of 1836, flying eagle silver dollar, (Gobrecht,) fine proof, \$23 52; a flying eagle dollar of 1838, proof, \$22; a flying eagle dollar of 1839, proof, \$23 50; a pattern three-cent piece of 1849, \$14. The sale of ninety-six copper cents amounted to \$281 17, and forty-eight half-cents to \$135. Eight hundred and one lots brought \$2,057.

THE BOOK TRADE.

- 1.—*Personal History of Lord Bacon from Unpublished Papers.* By WILLIAM HEWORTH DIXON, of the Inner Temple. 12mo., pp. 424. Boston: Ticknor & Fields.

It was but a month or two back we had occasion to notice Mr. James Spedding's collection of the works of that great author and official, Francis Bacon, denominated the wisest and brightest mind of the 16th century, now being in course of publication by Messrs. Brown & Taggard, of Boston. In this volume we have his personal history, bearing the imprint of Messrs. Ticknor & Co., publishers. Of Bacon's great acquirements, both in literature and the arts, there has latterly been but one opinion, though scorned at by many enemies of his time. Besides the acuteness and real wisdom displayed in his numerous essays, his philosophical researches in mastering the secrets of nature and applying them to human use are deserving of still greater credit. He clearly, for instance, invented a thermometer; he instituted ingenious experiments on the compressibility of bodies, and on the density and weight of air, besides suggesting chemical processes. He suspected the law of universal attraction, afterwards demonstrated by Newton; and he likewise foresaw the true explication of the tides, and the cause of colors, which he truly ascribed to the manner in which bodies, owing to their different texture, reflect the rays of light. But as Bacon grew older his moral dignity proved not on a level with his intellectual penetration. Giving himself up to improvidence, his want of money betrayed him into practices of corruption while Lord Chancellor, which ended in his disgraceful fall, added to fine and imprisonment. But in the lapse of time his unworthy deeds have mostly dropped away from memory, leaving the greatness and usefulness of his thoughts a monument of imperishable glory.

- 2.—*Considerations on some of the Elements and Conditions of Social Welfare and Human Progress.* By C. S. HENRY, D. D. 12mo., pp. 415. New York: D. Appleton & Co.

The pieces contained in this volume consist of a number of lectures delivered by the author at various times before such special bodies as the pupils of the New York University, Geneva College, University of Vermont, etc., etc., combining in their scope various topics, such as "The importance of Elevating the Intellectual Spirit of the Nation," "The Position and Duties of the Educated Men of the Country," "California: the Historical Significance of its Acquisition," "The True Idea of Progress," "The Destination of the Human Race," "Politics and the Pulpit," "Corruption, Violence, and Abuse of Suffrage." included in which are three letters addressed to the Hon. Joshua Quincy, on President making. These ingenious addresses, touching upon the great problems of human thought and embracing questions of the highest practical interest, are not without value, particularly those in relation to the working of our political institutions and our future fortunes as a nation.

- 3.—*The Mother in Law, a Tale of Domestic Life.* By MRS. EMMA D. E. N. SOUTHWORTH. 12mo., pp. 497. Philadelphia: T. B. Peterson & Brothers.

Is another new tale by that well known and much esteemed authoress, Mrs. Southworth. It represents the imperial days of Old Virginia, when her sons and daughters almost vied with Europe in aristocratic pride and dignity, and is told in her usually happy strain. Copies of the book will be sent to any part of the United States free of postage on persons remitting the price to the Messrs. Petersons, the publishers.

- 4.—*Education; Intellectual, Moral, and Physical.* By HERBERT SPENCER, author of "Social Statistics," "The Principles of Psychology," and "Essays; Scientific, Political, and Speculative." 12mo., pp. 283. New York: D. Appleton & Co.

The four chapters contained in this work originally appeared in the English reviews as separate articles, severally treating different divisions of the subject, where they claimed for themselves much attention. but an interdict being put on their publication in a collected form in England, by the proprietors of one of the reviews, the Messrs. Appletons believing Mr. Spencer's researches into the science of life and laws of mental development combine a masterly analysis in bringing to bear the latest results bearing on the art of teaching, have resolved to give it an American issue, knowing that it must prove useful to instructors and school directors, and become a valuable addition to the literature of education; and, at the same time, serve to make known an author, the strength and depth of whose thought is as remarkable as the clearness and vigor of style in which it is expressed.

- 5.—*Reminiscences of Scottish Life and Character.* By E. B. RAMSAY, M. A., LL. D., Dean of Edinburgh. 12mo., pp. 297. Boston: Ticknor & Fields.

There are doubtless many families and many individuals scattered throughout this country who, from ties of kindred or from their own recollections of the Land o' Cakes, will feel their hearts glow with emotion when they read stories such as these on such subjects as the religious feelings and religious observances of the Scotch, old Scottish conviviality, old Scottish domestic servants, humor proceeding from Scottish language, including Scottish proverbs, Scottish stories of wit and humor, etc., etc. The quaint mode of expression pertaining to the old Scotch dialect has always been proverbial, and when combined with the natural simplicity of the Scottish character, possesses a charm far above what we deem common-place smartness. As Pope has it, "There is majesty in simplicity which is far above the quaintness of wit." The object had in publishing the little volume is to furnish a class of anecdotes peculiar to Scotland, and to preserve a page of their domestic national annals which, in the eyes of rising generations, is fast fading into oblivion.

- 6.—*Autobiography of the Rev. Dr. Alexander Carlyle, Minister of Inveresk.* Containing Memorials of the Men and Events of his Time. 12mo., pp. 471. Boston: Ticknor & Fields.

This will be found a deeply interesting volume to all those interested in English church history so far back as the beginning of the present century, embracing, as it does, the private diary of Alexander Carlyle, D. D., for fifty years minister of Inveresk, who, if persons be estimated by the influence they have imparted from mere personal character and ability, was a very remarkable man. Born in a simple manse, learned, eloquent, liberal, and exemplary in his manners, he ever remained that type of humble respectability—a village pastor. His lot not being cast in any of those revolutionary periods which gave men of his stamp a place in history, he seemed pervaded with but one ambition to dignify his calling by bringing it forth in the world, and making for it a place along with rank and distinction of every kind. He was eminently a good man, and his autobiography will be found one of great interest as historically connected with men and events of his time. The style is easy, rambling, and familiar, and shows the author to have been possessed of a good memory, great observation, and much penetration.

But the most important and overwhelming objection to a system of society founded upon the principle of *communism* is the great difficulty which such societies must experience whenever they attain any noteworthy magnitude and embrace all descriptions of mankind, *in preserving the joint earnings, or aggregate revenue of the society, from misapplication and waste.* It would be impossible for the ingenuity of man to devise a better method for economizing wealth, or preserving it from misapplication and waste, than that of leaving it to the watchfulness and frugality of its individual possessor, reckless as individuals sometimes are in squandering their own possessions. **NO MAN IS SO WATCHFUL AND CONSIDERATE OF THE COMMON INTERESTS OF MANKIND AS HE IS OF HIS OWN INDIVIDUAL INTERESTS.** This is the great fact, or law, which, independently of other sufficient objections, conclusively demonstrates the fallaciousness and futility of the principle of *communism* as the basis of human society. We find this great fundamental law clearly enough illustrated in the notorious fact that all enterprises undertaken on the public account are far more expensive and less economically managed than those prosecuted on individual responsibility.

How then is the aggregate annual revenue of your communist society to be preserved from misapplication and waste, when it shall have expanded into an empire embracing thirty millions of people? The total earnings of the whole society are the common property, and must go into the common coffers of the whole society. How is so vast a revenue to be guarded and protected from embezzlement and roguery? The most approved and rigid system of financial administration that the accumulated experience and wisdom of ages have established for human society would strive in vain adequately to protect it. With all the safeguards that modern legislation has thrown around the treasury department of state governments, it has been found impossible to protect it from peculation and fraud. Gigantic frauds and peculations upon the public treasury are of frequent occurrence in the most enlightened and civilized communities of Christendom. How much greater would be these frauds and peculations if the whole joint revenues or earnings of these communities were collected into the common coffers of the State, instead of the small proportion of those revenues that are collected, in the shape of taxes, for State uses!

Great complaint is often made by mankind, and by none more loudly than by these advocates of *communism*, the Owenites, Fourierites, and the like, against the oppressive and injurious nature of State taxes; and they consider a *tithe*, or a tax amounting to a tenth part only of every one's individual revenue, as very burdensome, although the real effect of the tax is nothing more than to make the government of the State the distributor of a tenth part of the aggregate revenue of the society, which tenth part, in such case, goes to maintain the functionaries of government. And yet these very Owenites and Fourierites advocate a plan whereby the

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eral are willing to submit to such an arbitrary and meddlesome government as that of the Shaker sect. But there must inevitably be a failing, under that system, of society, as to those extraordinary efforts to which, after all, we are indebted for nearly all the great contributions to art and science, which are the main promoters and supporters, both of the material and spiritual interests of mankind.

Of all kinds of effort, intellectual effort is the most laborious, irksome, and painful. Yet it is precisely this kind of effort to which mankind are indebted for their most valuable improvements—to their inventions in art and discoveries in science. How few comparatively would be stimulated to put forth those efforts, and this too, with that extraordinary degree of zeal necessary to successful achievements, under a system of society in which those efforts would redound only to the general good of mankind, without any special and particular advantage to themselves? Is there any proposition of moral science more mathematically certain, and indisputable, than this, that *extraordinary effort requires extraordinary stimulus, and is entitled to extraordinary compensation?* Yet in this unnatural and subversive system of society, it is expected, by its advocates, that extraordinary efforts are to be obtained from merely ordinary stimulants and hopes of reward.

It may indeed be contended, that the higher orders of genius are sufficiently stimulated to exertion by the pure love of truth, and desire for achievements—that the Platos and Humboldts of humanity rise superior to considerations of merely personal advantage and motives of merely personal ambition, in their efforts to advance the cause of science. Undoubtedly this is true, to some extent, and to a far greater extent with the higher orders of men of genius than with the lower. But it is not true to a sufficient extent to break the force, materially, of the consideration against which it is urged. For men of the very highest order of genius are undoubtedly influenced, to a considerable degree, by motives of personal ambition, the hope of personal advantage, and the like,* while with the vast majority of mankind such influences are paramount, and almost exclusive in their sway.

Can any one doubt, then, that under the *communist* system of society there would be an incalculably lower standard of attainment, and general proficiency, in art and science, than under the *individualized* system, under which mankind have hitherto almost invariably lived? Where would be found the inventors and discoverers of this state of society? Who would be the Watta, the Arkwrights, the Jacquards, the Whitneys,

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Robert Owen has been so often referred to, already, in the course of this review, and his most prominent and distinguishing ideas so clearly pointed out, that little need here be said concerning him, and that little is but little more than a repetition of what has been already said, although incidentally, rather than with any particular reference to the part he has played in the history of social philosophy, or the particular place he occupies as a representative of any particular class of sociological ideas.* In common with all of his class, (which is the class now under particular consideration, or the Third Class of the Political School, according to the classification which we have ventured to adopt of the multitudinous forms of sociological opinion,) Robert Owen evidently supposed that the social ills of mankind, or, rather, those natural ills of mankind which are observable under every form of human society, are referable, mainly, if not exclusively, to some faulty or erroneous organism of society, which it is possible radically to change. He imagined that an organization of society was possible, in which those ills would entirely disappear, and that he had discovered that organization. What that organization was, as well as the general scope of Owen's theory of society, cannot well be more briefly expressed than by himself, in the recapitulation of his work, entitled *Book of the New Moral World*. "To effect these changes," he says, "there must be not only a new organization of society, on the principle of *attractive union*, instead of *repulsive individualism*, but there must be, also, an entirely new 'classification of society,' according to age, and not according to the birth or wealth of individuals."† Thus it appears that this superficial and undiscerning reasoner, in his allusion to the different principles of classification that may be adopted for human society, and while making special reference to those of age, birth, and wealth, overlooks the most important of all, though, like all the most important principles, to be sure, the most difficult to be actualized, *the principle of classification according to talent, capacity, or merit*—which was the principle adopted by St. Simon, though, like all simple or single principles, utterly delusive, as a panacea for social ills, were it possible to enforce it, since human society is, and must ever be, when in a high state of civilization, an arrangement of vast and bewildering complexity, extending far beyond the scope of such visionaries as Owen and St. Simon, and the ken of their philosophy.

Having the sagacity to discern, and fully recognizing the great truth in social science, *that in order to reform society, it is necessary to reform men*, Robert Owen had the weakness to suppose that the reformation of men was no very difficult task, that a system of education was possible which would invest all men with exalted characters, and that he had discovered that system. On this point his own words briefly express his extravagant delusion. Thus he says in one place: "By this simple. easy.

HUNT'S MERCHANTS' MAGAZINE

AND COMMERCIAL REVIEW.

MARCH, 1861.

Art. I.—REVIEW, HISTORICAL AND CRITICAL, OF THE DIFFERENT SYSTEMS OF SOCIAL PHILOSOPHY :*

OR, INTRODUCTION TO A MORE COMPREHENSIVE SYSTEM.

PART XI.

THE THIRD CLASS OF THE POLITICAL SCHOOL—A CRITICAL COMPARISON OF IT WITH THE FIRST AND SECOND CLASSES—THE TWO GRAND DIVISIONS OF THE CLASS STATED AND DEFINED—THE FIRST DIVISION SHOWN TO EMBRACE ALL THE VARIETIES OF COMMUNISM—THE THREE GRAND OBJECTIONS WHICH DEMONSTRATE THE FALLACY OF COMMUNISM AS A BASIS OF HUMAN SOCIETY—VARIOUS ADVOCATES OF SOCIAL REFORM BRIEFLY ALLUDED TO—OWEN AND FOURIER PARTICULARLY NOTICED AND CRITICALLY EXAMINED.

THE third class of the political school of sociological ideas, upon the consideration of which it is proposed now to enter, is, by far, the most erroneous of the whole school, and, at the same time, by far, the most bold in its aims at social improvement, the most diversified in its views, and the most suggestive of deep and searching reflections upon the vast and complex problem of human society. This class has been already defined as embracing *those which aim at improving the social condition to an extent totally impracticable, and utterly chimerical to calculate on, and which either propose, (as one division of the class do,) to use government, or the political authority of the community, as a means for attaining this impracticable end, or, (as another division of the class do,) in their frantic ravings against all government, as the great paramount cause of social ills, propose a total abolition of all government, prospectively, if not immediately, as an indispensable prerequisite to the realization of their delusive dreams.*

It is in this class that the distinctive peculiarities and fundamental errors of the whole school are most distinctly and conspicuously illus-

* Entered according to an act of Congress, in the year 1859, by Geo. W. & Jas. A. Wood, in the Clerk's Office of the District Court of the United States, for the southern district of New York.

trated. For the first and second classes, as already remarked,* illustrate these errors *negatively*, rather than *positively*. They may be regarded as attributing the social grievances of mankind to *political* causes, because they do not aim at any other than *political* instrumentalities for the improvement of the social condition, although they do not, like the third class, *positively assert* that those grievances are to be attributed to political causes, as their sole, or principal, essential causes. The social philosophers of the first and second classes have, indeed, omitted to attempt any *diagnosis* of the social diseases which they have attempted, very imperfectly, or erroneously, to treat. They seem to have been completely engrossed with questions as to *what political expedients are most conducive to the welfare of society, or the body politic*, and have not given any particular attention to the *pathology* of the body politic, or the nature and causes of those social ills which demand remedial appliances. They seem to have followed merely their *instincts*, which, wisely enough, taught them, that there was much to be done for human society by political institutions, without consulting their *reasons*, as to how far such influences tended to benefit humanity. In this they have been much more at fault than those of the third class, who have, far more judiciously, inquired into the nature and causes of the social grievances which they have sought to remedy; for assuredly nothing can conduce so much to the discovery of the proper mode of treating any disease, whether bodily or social, as a just and clear appreciation of its nature and causes. But the great error of these social doctors of the third class has been that, in inquiring after the real nature or essential cause of the social ills which they have aspired to remedy, they have palpably mistaken it. They have mistaken the *symptoms* of the disease for its cause, the mere *branches* of the tree for its *roots*, and have been, in consequence, led not only into very serious errors of practice, but such as are positively injurious in their tendency and effects.

The three different classes of the Political School of Sociology may be briefly characterized as follows:—The great fault of the *first* class has been, that they have not carried their investigations into the philosophy of society far enough to discover, that after political institutions have exhausted all their legitimate expedients for the improvement of society, there is still an outlying region of social evil, altogether beyond the reach of their remedial appliances; that of the *second* class has been, that, in endeavoring to improve society, to a far greater and more comprehensive extent than the philosophers of the first class have aimed at, they have mistaken the proper methods for attempting this improvement, and have endangered the permanent welfare of society by striving for a political organism which transcends the legitimate and proper function of State government; that of the *third* class has been, that they have mistaken the real nature and fundamental causes of the ills they have sought to remedy. In short, the error of the *first* class has been rather an error of *omission* merely, in the work they have undertaken, that of the *second* class has been one of *method*, while that of the *third* class has been an error as to *the real nature of the work to be performed*.

The *first* class may be assimilated to those physicians who prescribe for their patients a very judicious regimen and course of medicine, and

* See number IX. of this review, in October number of Magazine for 1860.

there end their course of treatment. The *second* class may be assimilated to those physicians who, in addition to specific regimen and medicine, recommend, for their patients, general attention to diet, clothing, and exercise, but should deliver them over for these purposes to venal and corrupt hospitals, interested in neglecting and misusing their invalids. The *third* class may be assimilated to those physicians, or rather quacks and mountebanks in medical science, who pretend to have discovered the cause and cure of all diseases, when in fact they do not understand the real nature of any, and who prescribe, as a *cure all* for every disease, some wretched *nostrum*, which is really a cure for none, but tends, on the contrary, in a multitude of cases, seriously to impair the general health and constitution of the invalid.

What the philosophers of the first class have aimed to do at all, however partial it may have been, they have, in the main, aimed at well. What those of the second class have aimed to do, though more comprehensive and extensively useful, they have adopted an improper method for striving to accomplish. But those of the third class have not aimed at anything of real or substantial utility. Setting out, from the start, with a fundamental error as to the real cause of the ills they have combatted, they have proceeded throughout upon erroneous ideas as to the work to be performed.

In so far, indeed, as the first and second classes have adopted the error, *that the social grievances of mankind are referable, mainly and fundamentally, to political causes*, it has been merely a *quasi* adoption on their part—a qualified, partial, and *negative* adoption, (if it be proper so to speak,) which has not so far pervaded the general scope or *animus* of their speculations as to vitiate materially their ideas. But the third class have been so thoroughly pervaded and imbued with the error, that all their ideas have been vitiated thereby. They have been betrayed into all the greater errors, because they have erred systematically, and with a distinct recognition and deliberate adoption of the fundamental error upon which they have proceeded—just as a methodical and scientific system of error is more serious than an informal one, which may perchance occasionally stumble on the truth, not having any formally inaugurated error or fixed idea to exclude it, and as a fool, *secundum artem*, is of all fools the greatest. For Bacon has justly said that “the *apothecosis* of error is the greatest error of all, and when folly is worshipped it is, as it were, a plague spot upon the understanding.”* And, in like manner, it may be said, that the most deliberate and emphatic adoption of an error, is the worst error of all, and when a fundamental mistake in science is formally inaugurated, it is the most conclusive bar to the entrance of any just opinions, and most completely vitiates scientific endeavor.

Nay, moreover, and what is more important than all, the philosophers of the first and second classes, if they had failed to conduct mankind any great way towards a complete system of Social Philosophy, have failed also to do them any actual harm. But those of the third class have inflicted positive mischief on mankind, by their erroneous searchings. They have urged mankind to positively injurious courses of conduct, by the mistaken ideas which they have inculcated as to the real causes of human suffering, in the social state, as by inciting them, unnecessarily, to revolu-

* See *Novum Organum*, book I., aphorism 65.

tions and civil commotions, which, in the greater number of cases, do vast mischief without any good.

But that which most clearly distinguishes this third class of the Political School from the other two, as the very terms of our definition of the three classes indicate, is that it aims at *impossibilities*, *chimeras*—that it seeks to improve the social condition to an extent utterly impracticable—that it proceeds upon the idea of the PERFECTIBILITY OF MAN, as an attainable end.

It is difficult, (if at all possible,) to detect any logical connection between the two ideas, that government is the essential cause of the social grievances of mankind, and that man is a being of capabilities for perfection; and yet it is a singular and noteworthy fact, that they have generally, if not invariably, co-existed. The former of the two ideas may, indeed, not unfrequently be found unconnected with the latter; but the latter is rarely, if ever, to be met with, except in connection with the former. Wherever we meet with the idea, that man is endowed with capabilities for perfection, we are almost sure to meet with the idea, in intimate association therewith, that political institutions* are, either the sole or most important essential causes, which prevent those capabilities from being developed. Wherever we find an advocate of this delusive and insane idea of human perfectibility, there we are almost sure to find the loudest and most insane declaimer against governments, and the existing order of society. Both of these ideas are united in the class of sociological doctrines now under particular consideration.

The fundamental idea of this whole class, in all its manifold varieties and shades of opinion, as to the cause of those social grievances which all must admit it would be desirable to remove, were it possible, and in so far as it is possible, is succinctly expressed by a late writer, who seems to aspire to the honors of *quackery* in social science—Mr. Stephen Pearl Andrews, an American contributor to the cause of *delusion* in this important field of scientific inquiry. In a late publication, entitled "Cost the Limit of Price, a Scientific measure of Honesty in trade, as one of the fundamental principles in the Solution of the Social Problem," this writer says, "There are few persons who do not recognize the fact that there is some subtle and undiscovered cause of manifold evils lying hid down in the very foundations of our existing social fabric, and which it is extremely desirable should be eradicated, by some means, however much they may differ with reference to the instrumentalities through which the amelioration is to be sought for."†

This is the superficial idea which pervades and characterizes the whole class. They look merely to the foundations of the *existing social fabric* and the *framework of society*, in the causes of social ills. They do not think of looking to the foundations of human character, the fundamental principles of human nature, and the *eternal constitution and framework of the universe*, in which those causes are to be found deeply and ineradicably fixed—those principles of human nature, and that eternal constitution of things, on which every existing social fabric rests, as the mere spire of some grand temple rests upon the walls of the temple, or rather

* The term "political institutions" is here used in its broadest sense, and as comprehending whatever in the customs or principles of society takes the form of law or carries with it the force of law.

† See the work referred to, in the text, chap. I, sec. IV., page 16.

as the temple itself rests upon the solid earth. They do not consider that the fabric of human society must every where, like the spire of the temple, and the temple itself, be subject, not only to the imperfections of the human architect, but to the defects inherent in the materials on which he has to work, and the insufficiency of the foundation, as the sandy, miry, or sideling ground, on which he may have to build; and that it must be, moreover, exposed to all the vicissitudes, the alternations of heat and cold, of sunshine and storm, to which the moral, not less than the material, atmosphere is subject, and to all the deteriorating and destructive agencies to which the moral, not less than the material, universe is exposed, in both of which, alike, the ANGELS OF DEATH as well of LIFE are constantly on the wing. They do not consider that *hurricanes*, which infect the moral not less than the material world, may hopelessly damage the social edifice, however skillfully it may be constructed, and that *earthquakes* may disfigure it, shatter its walls, or utterly demolish it. Such a *hurricane* is that which is now sweeping over the great American confederacy. Such an *earthquake* is that which is now convulsing American society, the effects of which, on the social fabric of the American people no one can fully estimate.

This controlling idea of the class under consideration, is also manifest in the writings of the late Robert Owen, a somewhat prominent, and in some respects highly meritorious, member of the class. In his work entitled "Book of the New Moral World, containing the National System of Society," this writer says, "Thus it was that in the days of Washington, Adams, Jefferson, &c., not one of them ever imagined that the countless evils suffered by humanity emanated from a few fundamental errors upon which society had ever alone been based."*

Here the weak and superficial idea, on which this whole class is founded, crops out into the most glaring prominence. Robert Owen, in common with many others of his class, would have us to believe that *all the countless evils suffered by humanity* are owing merely to a *few fundamental errors in the organism of society*, and which, if he were permitted to have the regulation of human affairs, for a score or two of years, he could entirely remove, and thus utterly eradicate human ills. He had not the sagacity to discern that "the countless evils suffered by humanity" are, in reality, owing, fundamentally, and for the most part, incurably, to fundamental evils or defects in *the very nature or organism of humanity*—nay, still more fundamentally, to evils or defects in the *whole organism of the universe*, with which humanity is inseparably connected, and of which it is as inseparably a part as the twigs of a tree are of the branches to which they belong, and of the common trunk whence both twigs and branches proceed, and that, as the defects, the germs of disease and decay, which are inherent in the tree, run through all its parts, and equally affect its trunk, its branches, its twigs, its foliage, and its fruit, so the defects or evils, which are inherent in all organic being, in the great tree of universal life, run through all its thousand-fold ramifications, and manifest themselves in man, and in all the works of his hand, and the devices of his head. He had not the penetration to see that "the countless evils suffered by humanity," which have been the endless theme of superficial declamation, in all ages, are but the widely-scattered leaves

* See work referred to in text, part v., chap. I., page 140.

of the great TREE OF EVIL, which overshadows the universe—that they are the natural offspring of that all-pervading SPIRIT OF EVIL which so completely invests the universe, and infuses itself into all created things, that the farseeing and godlike Plato doubted whether God himself was able completely to subdue it, but which the short-sighted Robert Owen vainly imagined he could entirely conquer, and banish from the realms of humanity, by his peculiar, and, in some respects, highly meritorious, plan for educating boys.*

This class of speculators in Sociology have a ready explanation for whatever grievances may be observed in the social state. Like the quacks in medicine, who attribute all the ailments of the human body to some impurities of the blood, these quacks in Sociology attribute all the ailments of society, or the body politic, to some defects or imperfections in the organism of society, either in respect to purely political arrangements, or somewhat more fundamental matters.

Do they observe a vast disparity in individual fortunes, some few of exorbitant wealth, many of straitened circumstances, and not a few in extreme destitution? If it is in a State where inequality of fortunes is positively encouraged, or upheld, by the political institutions, as in Britain, it is owing, they say, very obviously, to those positive encouragements—to the *primogeniture* and *entail* laws. If it is in a State where inequality of fortunes is not positively encouraged, but barely tolerated by the political institutions, as in Belgium and France, where property descends, by act of law, equally to all the children, where the *entailment* of estates is expressly forbidden, and where, as in France, parents are not allowed, (except to a very limited extent,) to dispose of their estates by will, so as to defeat their children's right to an equal distribution of them, they say it is owing, in some way or other, to the unjust principles on which the government is framed and administered, to its anti-republican character, to the enormous expensiveness of the public administration, and the large proportion of the means of the people that are appropriated by the public treasury to maintain extravagant State officials. If it is in a State where, not only is inequality of fortunes not at all encouraged by the political institutions, but where the government is framed and administered upon the most just and equitable principles that have yet been found practicable, on any large scale, where the expenses of the government are light, where the officials of government obtain only a very meagre and parsimonious allowance from the public treasury, and where a republican simplicity prevails in all the departments of the public administration, as in the United States of America—if, even in a State like this, a vast disparity of individual fortunes is still found to exist, and a vast deal of social privation to be experienced, it is owing, say these Solons in Social Philosophy, to "some subtle and undiscovered cause of manifold evils, lying hid down in the very foundations of our existing social fabric," or, as others might prefer to express it, and in the

* The most prominent essential idea of Robert Owen's plan for social reform, as before incidentally noticed, in this review, is the necessity for reforming mankind, which he proposed to do, mainly, through the instrumentality of an improved system of education, based upon the idea that men's characters are not of their own creation, but the creation of the circumstances by which they are surrounded from infancy to old age. He had the timidity and weakness to suppose that he could so fundamentally and extensively change the circumstances by which men are surrounded, and thereby so fundamentally and completely change their characters, as to make all men good, perfectly good, so that there should be no evil among men, either morally or physically. This is the whole substance of Robert Owen's reform project summed up in a few words.

phraseology of Mr. Robert Owen, it is owing to "a few fundamental errors upon which society *has* ever alone been based."

Is the business of a country deranged from any of the natural revolutions of trade, or inevitable oscillations in the course of nature; these superficial reasoners lay the blame on government. Are the laborers in any branch of business out of employment in consequence of some unavoidable derangement in the economy of the State, or from the partial or general redundancy of the laboring population; the government must, in their estimation, bear the blame, for it is the duty of government, they say, to *furnish employment for its citizens**—as if it could possibly be in the power of human governments to create an indefinite and unlimited demand for labor, and to furnish it with employment, when all the departments of the national industry are overstocked with laborers. Nay, is a man oppressed by the number of his children, in consequence of his own folly and crime in bringing offspring into the world, when he is too poor to maintain even himself, alone, in proper comfort; the fault must, in the estimation of these *savans*, even in this case, be laid to the account of government.

The most palpable and barefaced expression of this controlling idea of the class of sociological opinions under consideration, has been lately afforded by Mr. Elihu Burritt, the celebrated American linguist, commonly known as "the learned blacksmith." This erudite disciple of Vulcan, traveling through England, in the summer of 1846, and meeting with a brother disciple of the same trade, at his anvil, who was sorely oppressed with poverty, having to support a family of *five* persons, on *seven* shillings a week, and being compelled, in order to earn that small pittance, to put his son, a boy of only *nine* years, to hard smithy work, who was thereby stunted, dwarfed, and prematurely "case-hardened into all the induration of toiling manhood," instead of addressing himself to the boy's father, and reproving him for his folly and crime, in begetting the boy, when he could not earn but seven shillings a week, and therefore could not possibly maintain even himself, much less a family, in proper comfort and decency, he breaks out into senseless and ridiculous exclamations against Lord John Russell, then Prime Minister of Britain. "Oh! Lord John Russell," he exclaims, "think of it. Of this Englishman's son, placed by his mother, scarce weaned, on a high cold stone, barefooted, before the anvil; there to harden, scar, and blister its young hands by beating and hammering ragged nail rods for the sustenance her breast can no longer supply. Lord John, look at those nails, as they lie hissing on the block. Know you their meaning, use, and language? Please your worship, let me tell you, I have made nails before—they are *iron exclamation points*, which this unlettered, dwarfish boy is unconsciously arraying against you, against the British Government, and the misery of British literature, for cutting him off without a letter of the English alphabet, when printing is done by steam—for incarcerating him, for no sin on his or his parents' side but poverty, into a six by eight prison of hard labor, a youthless being."†

* This monstrous idea, the offspring of the most pitiful ignorance of the laws of Sociology and mere Political Economy, was put forth by the Red Republicans of France during the revolutionary crisis of 1846 and 1848, in that country.

† See Elihu Burritt's letter in 4th page of Richmond (Va.) *Christian Advocate*, of February 25th, 1847, and in West Jersey *Telegraph*, of prior date, whence it was copied by the *Advocate*.

It may be worth while to remark, that, in so far as Lord John Russell may be justly chargeable with neglect of popular education, with having so neglected the education of the boy's father in

This pestiferous error in Social Philosophy, that political institutions, (or the framework of society,) are, in some way or other, the essential and really efficient causes of those social ills which it is the proper aim of social science to remedy, or to mitigate, presents itself in so many different forms, in all ages and countries, that it is quite impossible to assign to it any local habitation or chronological epoch. We may discern it in the shouts of the Roman rabble that stood around Tiberius Gracchus, when he advocated his famous project for the revival of the old Licinian law, restricting landed possessions to 500 acres, a law good enough in its intentions, but futile in its operations, and waging vain war with the unutterable laws of nature. We may discern it in the frantic excesses of the French Jacobins during the ever-memorable epoch of the first French revolution. We may discern it in the monstrous doctrine put forth by the Red Republicans of France, during the last French revolution of 1848, that *it is the duty of government to find employment for its citizens*, and that, consequently, the government is to be held responsible if any of its citizens are out of employment. We may discern it in the revolutionary schemes of the English chartists. We may discern it in the discontent of the lower orders, and their proneness to revolution, in all countries in which the political institutions are not framed upon such principles as appear just and equitable to the obvious and common view, however well adapted to the actual condition of the community. We may discern it in the innumerable projects for revolution or social reform, by which this age, beyond all others, is infested—in the projects of the "Anti-Renters," "Land Reformers," and the like of the Owenites, Fourierites, St. Simonites, and Shakerites. For although the error in question is not confined to any local habitation or chronological epoch, yet it has been much more prevalent, or at least more prominently developed, in the present than in former times—an observation, indeed, which may be applied generally to the class of sociological opinions under consideration, and of which this error is the most *essentially* distinguishing idea.*

And here it may be proper to remark, that it should not appear strange, or irreconcilably contradictory, that, while the *second* class of the school of sociological opinions under consideration, was more prevalent in ancient than in modern times, and conformably with what might be reasonably expected, as being more essentially erroneous than the first class, the third class, which is still more erroneous than the second, should be more prevalent, or, at least, more prominently developed, in modern than in ancient times. This, too, will be found, on a thorough examination, to be consistent with the suggestions of reason. It will be found to be in ac-

this case, that he did not realize the necessity for abstaining from marriage, until he could better his fortunes, his lordship is justly amenable to the censure which Mr. Burritt seeks to fasten upon him. But this matter again of popular education is a far more difficult one than is commonly imagined. It is one thing to discern what ought to be done, or is needed, and quite another, and far more difficult, to discern *how it is to be effected*. How to get education or knowledge into the brains of a population who are so much pressed by the necessities of bare life that they can scarcely spare time for sleep, much less for mental culture, from the dreddery of hard, brutifying labor, is a question demanding the consideration of far deeper thinkers than Mr. Elihu Burritt has proved himself to be. The British Parliament have repeatedly striven, but in vain, against the giant difficulties which oppose the efforts of philanthropy in this direction, by their futile laws for restricting the hours of labor among children.

* It has been already clearly remarked, that the most *clearly* distinguishing idea of the class, is its belief in the perfectibility of man. (See page 278 of this article.) But the error in question is the most *essentially* distinguishing one, though less patent to the common view.

cordance with the general law, that, *the higher the organism, the greater the adaptability to both good and evil, truth and error.*

It is not at all inconsistent with this general law, that, in the ruder stages of organic development, whether in social or zoological life, or rather, in scientific, or intellectual, as well as in animal life, in opinion, as well as in actual formation, imperfections and rude formations should be more prevalent, more general, than in the highest stages of development, and yet that, in these higher stages of development, extraordinary imperfections or malformations should be also more prevalent. In the one case, rude formation, or manifestation, is the *rule*, in the other it is the *exception*. Nor is it at all extraordinary that the *malformation*, where rude formation is the *exception*, should be greater than where such formation is the *rule*.

The law that the *higher the organism the greater the adaptability, and consequently liability, to both good and evil*, is not inconsistent with the other equally well established law or fact, which, at first view, might appear contradictory, *that, in the lower stages of all organic development, the general and prevalent formation is inferior to what we find in the higher stages.* It is entirely consistent with this last stated law, that, in the higher stages of organic development, we should find the greatest and most strongly marked malformations—that where the highest forms of excellence are found, there also the highest forms of deformity should be found, and that the ancient proverb should find substantial verification, “where truth most abounds, there also does error most abound.”

These fundamental principles are plainly enough illustrated in the realm of zoological life. For while among the lower orders of animals, as among those of the *reptilian* class, for example, the prevalent formation is far inferior to what prevails among the higher, as the *mammalian*, and among the lower orders of the mammalian class it is inferior to what prevails among the highest, or the human race, yet *monstrosities* and utter *abortions* of nature are more frequent among the latter than the former—as calves with four heads and seven legs, children deformed in all their limbs, or blind, deaf and dumb, idiotic, or insane.

Nor do we find these principles less clearly and forcibly illustrated in functional than in mere anatomical organism, or, rather in cerebral, than in more animated life. For while among the lower order of animals the brute passions are much more prevalent than among the higher, or the human race, yet among the latter we sometimes find those passions carried to a far greater and more deplorable excess than among the brutes. For example, among tigers ferocity is far more prevalent than among men; yet some men are more ferocious than tigers. Again, among swine libidinousness is far more prevalent than among men; yet some men are more libidinous than swine. The brute tiger is content to destroy his victim—it is the human tiger alone that delights in *torturing* him. The brute libertine craves only the natural gratification of his lust, and with that is satisfied. It is reserved for the human libertine, to cherish unnatural passions—to refine upon his lust, until it can only be gratified by an indulgence *highly seasoned with iniquity*, an indulgence whose incense is the agony of immolated virtue.

And as it is in zoology, in these respects, so we find it also in sociology. While in earlier times the ideas in sociology which generally prevailed were inferior, decidedly, to what they are in modern times, and were rude

in comparison with them, yet we nowhere find, among the sociological speculations of antiquity, any such monstrosities as have been put forth in modern times by Rousseau, Condorcet, Godwin, Owen, and Fourier, not to name a host of others, less known to unenviable fame.

The class of sociological opinions, or doctrines, now passing under particular review, the Third Class of the Political School, (as we have designated it,) presents, as already intimated, two essentially different *phases*, and separates into two widely diverging *divisions*—the one seeking to employ government, or the general force of society, to a far greater extent than it has hitherto been employed among human societies, but upon essentially different principles from those on which it has hitherto been employed, and the other aiming at the total abolition of all government, or control by the general force of society—the one, in short, seeking to *merge the individual completely in the society*, and the other seeking to *effect the complete triumph of the individual over society*. Widely divergent, however, as are these two divisions of the class, they unite on this—their common standing ground—that mankind are endowed with capabilities for moral and physical perfection, and that government, or political authority, as it has hitherto been employed in human society, has been the main cause or obstacle which has prevented these capabilities from being developed and manifested.

To the *FIRST* of these two divisions belong Owen, Fourier, and the communists in general; to the *SECOND*, Rousseau,* Condorcet, and Godwin, with a long catalogue of kindred spirits, whose essential ideas will be sufficiently illustrated and commented on, in what it is proposed to say of these three, and more particularly of the last named.

The first division of the class, and all those various projects for social reform which take the form of Communism, as all of this division do, are liable to these three grand and insuperable objections;—1st, That they must either so value the springs of *industry* as to diminish seriously the production of wealth, or they must be sustained by governments of far more rigid, intermeddlesome, and offensive powers than have ever yet been deemed tolerable by civilized communities. 2d, That they must unavoidably so impair *economy* in the preservation and distribution of wealth, or the aggregate earnings of the national industry, as to occasion great misapplication and waste of those aggregate earnings. 3d, That they must, unavoidably and under any circumstances, tend to lower, incalculably, the level of civilization and human attainments in arts and science.

The practical refutation of all schemes for a society founded upon the principle of *communism* is, in fact, afforded by the familiar proverb that "what is everybody's business is nobody's business," an argument which, as we have before had occasion to remark, was urged against that system of society, some two thousand years ago, by Aristotle, in his reply to the vagaries of Plato in relation to community of property, wives, and children.†

* Having already noticed Rousseau as belonging to the first class of the Political School, it may be necessary to explain how it is that he is referred to here as belonging to the third class. The explanation is this: By his "Social Contract" Rousseau is affiliated with the first class—by his "Inequality of Mankind" with the third, and to this third class indeed he essentially belonged, although his work on the "Social Contract" deserves to be differently classed.

† See No. IV. of this review in January No., 1856, of *Mercantile Magazine*, vol. 42, p. 31.

In short, the philosophy of the whole matter may be summed up in this one sentence: Wealth can only be produced, or human subsistence earned, by severe, untiring labor, persevered in under many discouragements, and nothing less than the quickening, intense stimulus of *individual acquisitiveness* is adequate, in the long run, and with the vast majority of mankind, to insure the exertion of this indispensable labor. Where this stimulus to labor is destroyed, as it is in all communities in which the principle of communism is carried into full effect, its place can only be supplied by the principle of *coercion*, which, according to the essential idea and life-sustaining principle of communism, must be applied by the *common force* of the community, which common force must be lodged in its general government, or political authority, whatever that may be. In other words, communist societies must be sustained by governments (whether monarchical, aristocratical, or democratical,) of the most vigilant, prying, and intermeddlesome character—governments which shall extend a system of *espionage* throughout the whole community, and play the *overseer* to every man, with a view to compelling every one to do his duty—governments, in short, which shall exercise very much the same strict control over their subjects that the *overseer* of a Georgia or Mississippi cotton field exercises over the slaves entrusted to his authority. Accordingly we find that the only societies, of any noteworthy magnitude, in which the *communist* principle has been even partially carried into effect, that of the Incas of Peru and of the Slave States of the American Union, have been those in which a very large proportion of the society, all, in short, to whom the *communist* principle has been actually applied, were veritable slaves. It should hardly be necessary here to remark, in addition to what has been before said on this point,* that society in the slaveholding States of the American Union, in so far as the slave population is concerned, is founded, substantially, and in the main, on the principle of *communism*, the earnings of the slaves in every separate *commune*, family, or plantation, going into the common coffers, granaries, and storehouses of the establishment, to be distributed thence according to the wants of the slaves and the pleasure of the master.

In regard to those very small societies, like those of the Shaker sect, in which the principles of *communism* is fully carried out, and in respect to every member of the society, it is to be observed that the fact of their not exhibiting in any marked manner any very offensive feature of government, or interferences with personal liberty, is no valid argument whatever against the view here presented, as to the necessarily *slavish* character of all societies in which the principle of communism is rendered actually operative, on any large scale. These Shaker societies owe their exemption from any such palpable manifestations of rigorous government, partly to the excellent character of the individuals composing them, and their eminent fitness to do their duty without the stimulus either of individual acquisitiveness or coercion, (in which respects they are much superior to the generality of mankind, and constitute a really select and superior class of men) and partly, if not mainly, to their insignificance—to the limited range of their operations, resulting from the smallness of their numbers, and the fewness and simplicity of their wants.

* See No. XL of this review, in December No. for 1859 of *Merchants' Magazine*, vol. 41, p. 668.

It is with these Shaker societies, in this respect, as we have had occasion to remark, it was with the ancient nations in respect to the great fallacy in social science, that, *it is the duty of government, or the general force of society, to supervise and control the religious conduct and opinions of the citizen.** So long as mankind had no religious opinions to which they attached any great value, no religious opinions which penetrated very deeply into their moral sentiment, or influenced materially either their private or public conduct, this erroneous principle did not manifest itself in any very injurious consequences. But when they came at last to embrace a religion to which they did attach great value, which penetrated very deeply into their moral sentiments and emotional nature, and which exerted an important influence in their public as well as private actions, then it was quickly discerned with what tremendous power of mischief this hitherto harmless principle was fraught—then it was discovered that it was the *embryo* of formidable evil—the *egg of the unhatched crocodile*.

In like manner, so long as the Shaker societies are restricted to *villages of some three or four thousand persons*, and embrace only those few individuals who are by nature peculiarly adapted to such a form of society, no very objectionable manifestations of political authority are likely to be needed or exhibited by them. But let these Shaker societies be expanded into *empires of three or four millions*, not to say of *thirty or forty millions of people*, and let them come to embrace men of all descriptions of character, the indolent as well as the industrious, the turbulent as well as the orderly, the vicious as well as the virtuous, then it would be found that they would need the most rigorous and arbitrary government—nay, then it would be found that the government which they now have, and which, apparently, is so mild and gentle, is in reality an *embryo* despotism of the most unlimited away—then it would be found that the venerated and beloved “chief elder” of the village, whose sovereign will is the supreme law of the society, and whose authority, absolute as it is, is now regarded with as little repugnance as parental authority in the domestic household, would expand into the dimensions of a potentate of really more sweeping prerogatives than the Sultan of Turkey or the Great Mogul. In order to make all members of the community do their duty, to which in a communist society men cannot have any motive except a vague sense of self-interest, the still more feeble sense of duty, or the fear of punishment, from the common force or political authority of the society—in order to make all the members of the Shaker community do their duty when it should have expanded into an empire of thirty millions, embracing all descriptions of human character, the monarch of the society, or “chief elder,” as he is now modestly styled, would have to be entrusted with a vast police force and large standing armies to enforce his imperial authority. Thus clothed with legal and actual powers of such vast proportions, wherein would he differ from other of the most absolute potentates of the earth? What guaranty would there be that he would not vastly abuse his extraordinary powers—unless indeed he should chance to be one of those rare and extraordinary characters that occasionally loom up like *oases* in the *desert* of human character, an Antonine, Alfred, or Washington?

* See No. x. of this review, in December No., 1860, of *Merchants' Magazine*, vol. 43, p. 668.

But the most important and overwhelming objection to a system of society founded upon the principle of *communism* is the great difficulty which such societies must experience whenever they attain any noteworthy magnitude and embrace all descriptions of mankind, *in preserving the joint earnings, or aggregate revenue of the society, from misapplication and waste.* It would be impossible for the ingenuity of man to devise a better method for economizing wealth, or preserving it from misapplication and waste, than that of leaving it to the watchfulness and frugality of its individual possessor, reckless as individuals sometimes are in squandering their own possessions. **NO MAN IS SO WATCHFUL AND CONSIDERATE OF THE COMMON INTERESTS OF MANKIND AS HE IS OF HIS OWN INDIVIDUAL INTERESTS.** This is the great fact, or law, which, independently of other sufficient objections, conclusively demonstrates the fallaciousness and futility of the principle of *communism* as the basis of human society. We find this great fundamental law clearly enough illustrated in the notorious fact that all enterprises undertaken on the public account are far more expensive and less economically managed than those prosecuted on individual responsibility.

How then is the aggregate annual revenue of your communist society to be preserved from misapplication and waste, when it shall have expanded into an empire embracing thirty millions of people? The total earnings of the whole society are the common property, and must go into the common coffers of the whole society. How is so vast a revenue to be guarded and protected from embezzlement and roguery? The most approved and rigid system of financial administration that the accumulated experience and wisdom of ages have established for human society would strive in vain adequately to protect it. With all the safeguards that modern legislation has thrown around the treasury department of state governments, it has been found impossible to protect it from peculation and fraud. Gigantic frauds and peculations upon the public treasury are of frequent occurrence in the most enlightened and civilized communities of Christendom. How much greater would be these frauds and peculations if the whole joint revenues or earnings of these communities were collected into the common coffers of the State, instead of the small proportion of those revenues that are collected, in the shape of taxes, for State uses?

Great complaint is often made by mankind, and by none more loudly than by these advocates of *communism*, the Owenites, Fourierites, and the like, against the oppressive and injurious nature of State taxes; and they consider a *tithe*, or a tax amounting to a tenth part only of every one's individual revenue, as very burdensome, although the real effect of the tax is nothing more than to make the government of the State the distributor of a tenth part of the aggregate revenue of the society, which tenth part, in such case, goes to maintain the functionaries of government. And yet these very Owenites and Fourierites advocate a plan whereby *the whole revenue of society* must pass into the hands of the State government, and be subjected to the control of its peculating officials.

Aristotle mentions, as an extraordinary instance of the unjust and tyrannical exercise of political authority, that Dyonisius of Syracuse had so multiplied taxes that, within the space of five years, the property of every individual in the State had passed into the royal treasury.* Yet

* See Aristotle's Politics, book v., ch. 2.

these Owenites and Fourierites, in their extreme horror of such governments as that of Dyonisius, propose a form of society whereby the property of every individual in the society shall pass, *every year*, into the State treasury, or rather shall be permanently vested in the State treasury and be subject to its control.

But it may be urged, there is no danger that the property, or joint revenue, of a society will be misapplied, to any great extent, where, by the very theory and constitution of the society, all are equal owners of the property and equal sharers of its profits, and are therefore equally interested in their preservation. Very little danger, perhaps, so long as your society is no larger than a common debating club, or a Shaker community, where the emoluments of office are not sufficient to tempt avarice, nor its circle of operations comprehensive enough to elude common observation. But try your Fourierite society on the great British Empire, with its 30,000,000 of people, a net land rental of 45,000,000 pounds sterling, and an agricultural product, alone, of 670,000,000 pounds. Let all these rents, or, (rents being abolished under this joint stock system of society,) let all this agricultural production, whether in actual produce, or partly in that and partly in money, pass into the hands of government officials to be kept under the locks and keys of government, and to be distributed, *either in equal or rateable shares*, to all the inhabitants, by heads of families. Who will undertake to estimate the amount of corruption, swindling, and abuse of the common interests that would be experienced under such circumstances?

It is notorious that in the city of New York it is almost impossible to get even a street graded without outrageous fraud and imposition on property holders, by the plundering officials of the city government. How much greater would be such frauds and impositions in a state of society in which all the great interests of the society and the total joint revenue of its industry have to be entrusted to the management of government officials?

In the single county of Hamilton, in the State of Ohio, in the single operation of building a court-house and jail, at an estimated cost of \$250,000, an ample allowance for the undertaking, if conducted with the proper economy and prudence, the public have already had to pay upwards of \$750,000, and the work is not now completed, after a lapse of nearly ten years from its commencement in 1851. Where has all the squandered public money, in this case, gone? Into the pockets of dishonest and reckless public officials, and their colluding favorites, to be partitioned "for the common defence and general welfare," among political sharks and official vampires! How then would your Fourierite society work in Hamilton County, with its provincial Cincinnati? Nay, how would it work in the great British Empire, with its metropolitan London?

But the advocates of communism will probably tell us that the rulers and officials of a communist society are expected to be strictly honest men. Most indubitably! And where are we to find these strictly honest men? In Plato's ideal Republic, assuredly, in More's Utopia, Godwin's Political Justice, and other like phantom castles, built high up in the air, like the castle of Jack the Giant-killer, so famed in nursery legends.

The difficulty of obtaining strictly honest men, in other words, good

and true men, has been the grand difficulty that has ever blocked the way of efforts for reform and a permanent amelioration of the condition of humanity. If we could only get these strictly honest men, then any form of society would be good enough; and without these no form will avail much, since human society must ever be a mere production or reproduction of the individuals composing it, into whose character its own must ever be resolvable. It is the fact that strictly honest men—good and true men—are so few, which renders it necessary, on the one hand, that we should have government at all, and, on the other, renders it advisable that we should have as little as we can possibly do with—both facts of great and almost equal value in social science, yet neither of which seems to be known, or, at least, duly estimated, by many who venture to speculate on “social reform.”

The third grand objection, already stated, to a system of society founded upon the principle of communism, *that it must inevitably tend to lower incalculably the level of civilization and human attainment in art and science*, results from the two already considered, but principally the first, or rather from the principles on which those two objections, and principally the first, are founded. For although rigid government or constraint by the general force of the community, when aided by other influences which the principle of communism is able to enlist, may be a tolerably efficient substitute for the stimulus of individual acquisitiveness and ambition, it can never be a sufficient substitute, or full equivalent therefor. *Constraint cannot engender such powerful impulse to activity as allurements or spontaneous desire.* The fear of punishment, as a stimulus to exertion, can never be a full equivalent for the hope of reward; nor can a vague, general sense of interest, such as a communist society inspires in its members, (and no other,) compensate for the loss of the direct and specific sense of interest which inspires men in a state of nature, and in a natural state of society. The incentives which actuate the slave can never adequately compare with those of the freeman, nor can the love of our neighbor, or mankind in general, be any other than a feeble sentiment in comparison with self-love.

With all the appliances, therefore, which the *communist* system of society can bring to bear upon mankind to stimulate them to exertion, that system must fail to actualize so large a *momentum of effort or labor* as the individualized and independent system, which is undoubtedly the normal and natural one, as is proved, clearly enough, by the fact that human society, everywhere, and almost invariably, takes that form spontaneously. Yet it is upon this *momentum* that civilization, with its thousand-fold developments, absolutely depends. With its diminution must come diminution of production, both in respect to material products and intellectual ideas, and a consequent lowering of the general condition of humanity; for labor is undoubtedly the great parent of wealth, both physical and intellectual, and the *quantum* of wealth must ever be proportionate to the *quantum* of effort employed in its production.

Under the community-of-property, or community-of-labor-and-profit, system, in which the specific and immediate sense of self-interest is supplanted by a vague, general, and remote sense of personal advantage, and in which the individual is, in short, completely merged in the society, there may be, indeed, sufficient effort calculated on to produce the common necessities of life in abundance, that is, provided mankind in gen-

eral are willing to submit to such an arbitrary and meddlesome government as that of the Shaker sect. But there must inevitably be a failing, under that system, of society, as to those extraordinary efforts to which, after all, we are indebted for nearly all the great contributions to art and science, which are the main promoters and supporters, both of the material and spiritual interests of mankind.

Of all kinds of effort, intellectual effort is the most laborious, irksome, and painful. Yet it is precisely this kind of effort to which mankind are indebted for their most valuable improvements—to their inventions in art and discoveries in science. How few comparatively would be stimulated to put forth those efforts, and this too, with that extraordinary degree of zeal necessary to successful achievements, under a system of society in which those efforts would redound only to the general good of mankind, without any special and particular advantage to themselves? Is there any proposition of moral science more mathematically certain, and indisputable, than this, that *extraordinary effort requires extraordinary stimulus, and is entitled to extraordinary compensation?* Yet in this unnatural and subversive system of society, it is expected, by its advocates, that extraordinary efforts are to be obtained from merely ordinary stimulants and hopes of reward.

It may indeed be contended, that the higher orders of genius are sufficiently stimulated to exertion by the pure love of truth, and desire for achievements—that the Platos and Humboldts of humanity rise superior to considerations of merely personal advantage and motives of merely personal ambition, in their efforts to advance the cause of science. Undoubtedly this is true, to some extent, and to a far greater extent with the higher orders of men of genius than with the lower. But it is not true to a sufficient extent to break the force, materially, of the consideration against which it is urged. For men of the very highest order of genius are undoubtedly influenced, to a considerable degree, by motives of personal ambition, the hope of personal advantage, and the like,* while with the vast majority of mankind such influences are paramount, and almost exclusive in their sway.

Can any one doubt, then, that under the *communist* system of society there would be an incalculably lower standard of attainment, and general proficiency, in art and science, than under the *individualized* system, under which mankind have hitherto almost invariably lived? Where would be found the inventors and discoverers of this state of society? Who would be the Watta, the Arkwrights, the Jacquards, the Whitneys, the Fitches, the Fultons and the Guttenbergs, of such a system of society, to say nothing of the Newtons, the Humboldts, and Platos? Can it be believed, that, if mankind had always lived under such a social system, they would now possess the magnetic telegraph, locomotion by steam, either on land or water, the steam engine itself, even as a stationary motor, or even the printing press?

In this connection, also, it may be important to remark, that those insignificant societies, like the Shaker communities, which have demonstrated the *communist* system to be at all possible, are indebted largely

* The embittered controversy between Newton and Leibnitz as to their mutual claims of priority in discovery as to some of their great mathematical ideas, may be cited in illustration on this point.

for the limited blessings which they enjoy to that very system of society which they have renounced, and whose many advantages they live in the very midst of, and enjoy, while they denounce it. They are mere *parasites* in the body of that system which they avowedly abhor, and flourish by the sustenance and support which they derive therefrom, like the *mistletoe* on the boughs of the oak.

There is not one of these Shaker societies that does not avail itself of the shovel, the hoe, and the spade, the plow, the anvil, and the loom, the chair, the churn, and the cart-wheel, every one of which they have borrowed from that system of society which they affect to have wholly abjured, and not one of which it is at all certain that they would ever have enjoyed, had mankind always lived in that state which they claim to regard as the true ideal of human society. And should it be objected to this view, by superficial reasoning, that we not unfrequently find useful inventors among these Shakers, it may very obviously be replied, that many of them have obtained their education in that highly advanced state of civilization which their sect claim to have renounced, and that, moreover, living in the midst of this high state of civilization, they cannot wholly escape its beneficial influences, in stimulating and inspiring them to thought and activity, just as the man who lives low down in the valley, but, surrounded by towering heights and Alpine grandeur, catches inspiration therefrom, which he would never experience if he lived in a monotonous, far-reaching, dead level plain—emblematical of the state to which the communist system of society, if fully carried out, would reduce the whole human race.

Before ending this general view of communism, it may be proper to remark, that there is undoubtedly much that is valuable in the principle, though difficult to be realized, without encountering other principles which more than countervail its utility, and that it is altogether probable that the principle might be advantageously introduced into human society, to a somewhat greater extent than it has hitherto been, on any large scale. But this further introduction of the communist principle, as we have already had occasion incidentally to remark, concerning *the relaxation of the political authority of states*,* and as we shall presently have occasion more particularly to notice, must come, if it come at all, with a gradual and general improvement of humanity. How far, or in what particular respects, the introduction of this principle would be advisable, though a highly important and difficult question, it would be scarcely consistent with the character of this review to consider. Nor will its consideration be entered upon here.

With these general observations, we might conclude our review of the principle of communism, as a basis of human Society, and of the first division of the class under consideration, all of whom advocate the principle, or some form or other. But some particular notice of some of the more prominent and notable exponents of the principle cannot well be omitted. Among the most prominent and notable of those exponents have undoubtedly been Robert Owen and Charles Fourier—the former of whom may be regarded as a characteristic exponent of the Anglo Saxon, and the latter of the Gallican, or French, style of thought.

* See No. x. of this Review in December No. of *Merchants' Magazine*, for 1860, vol. 43, pp. 670-71.

Robert Owen has been so often referred to, already, in the course of this review, and his most prominent and distinguishing ideas so clearly pointed out, that little need here be said concerning him, and that little is but little more than a repetition of what has been already said, although incidentally, rather than with any particular reference to the part he has played in the history of social philosophy, or the particular place he occupies as a representative of any particular class of sociological ideas.* In common with all of his class, (which is the class now under particular consideration, or the Third Class of the Political School, according to the classification which we have ventured to adopt of the multitudinous forms of sociological opinion,) Robert Owen evidently supposed that the social ills of mankind, or, rather, those natural ills of mankind which are observable under every form of human society, are referable, mainly, if not exclusively, to some faulty or erroneous organism of society, which it is possible radically to change. He imagined that an organization of society was possible, in which those ills would entirely disappear, and that he had discovered that organization. What that organization was, as well as the general scope of Owen's theory of society, cannot well be more briefly expressed than by himself, in the recapitulation of his work, entitled *Book of the New Moral World*. "To effect these changes," he says, "there must be not only a new organization of society, on the principle of *attractive union*, instead of *repulsive individualism*, but there must be, also, an entirely new 'classification of society,' according to age, and not according to the birth or wealth of individuals."† Thus it appears that this superficial and undiscerning reasoner, in his allusion to the different principles of classification that may be adopted for human society, and while making special reference to those of age, birth, and wealth, overlooks the most important of all, though, like all the most important principles, to be sure, the most difficult to be actualized, *the principle of classification according to talent, capacity, or merit*—which was the principle adopted by St. Simon, though, like all simple or single principles, utterly delusive, as a panacea for social ills, were it possible to enforce it, since human society is, and must ever be, when in a high state of civilization, an arrangement of vast and bewildering complexity, extending far beyond the scope of such visionaries as Owen and St. Simon, and the ken of their philosophy.

Having the sagacity to discern, and fully recognizing the great truth in social science, *that in order to reform society, it is necessary to reform men*, Robert Owen had the weakness to suppose that the reformation of men was no very difficult task, that a system of education was possible which would invest all men with exalted characters, and that he had discovered that system. On this point his own words briefly express his extravagant delusion. Thus he says in one place: "By this simple, easy, straightforward mode of proceeding, measures, the most effectual, will be adopted to prevent one human being from acquiring a single inferior quality, either of body or mind, and it is believed that the concentrated wisdom of society in this rational state of existence will be competent to

* See *ante* article No. viii., of this review, in July No., 1850, of *Merchants' Magazine*, or vol. 43, pp. 29, 30 and 31, of *Magazine*. See also pp. 279 and 280, of present article, and note to page last named.

† See "Owen's *Book of the New Moral World*, containing the *Rational System of Society*"—general recapitulation, p. 263 of work. First American edition, 1845.

effect this all-important purpose.* Thus it plainly appears, that this deluded visionary deemed it an easy matter to *prevent any one human being from acquiring a single inferior quality, either of body or mind*, whereas, on the contrary, all true philosophers must, by this time, have discovered, and come clearly to know, that the faults, imperfections, or *inferiorities* of men, not less than their opposite qualities—nay, that the *vices* of men not less than their *virtues*, are as fixed and immutable facts in nature as any other—that the *sixty-two* or more elementary substances, which chemical science recognizes, as existing in the material world, are not more indisputable and indestructible, than are all the known varieties of human character, bad as well as good—that it would be as idle, vain, and preposterous, to attempt, by any possible system of education, or training, of whatever sort, to reduce all these varieties of mankind to any one character, or standard of character, as to reduce all the elementary substances of the material world to one kind of substance, as gold—nay, moreover, what it seems never to have entered into the philosophy of such superficialists to imagine, that if they should succeed in making all men of one common character, if they should succeed in making all men merely wise and virtuous, they would be found to have worked incalculable mischief instead of good, to have subverted the real plan of creation, and to have achieved as barren a triumph as those chemists were aiming at, who wasted their time, through long ages, in foolish endeavors to turn inferior metals into gold—that in short vice and virtue, or, in larger terms, evil and good, are, in all probability, as inseparable, necessary, and vital parts of the great plan of creation, so little comprehended by human intelligence, as pain and pleasure, falsehood and truth, darkness and light, repulsion and attraction, disease and health, decay and regeneration, death and life.

Robert Owen was inspired with the more extraordinary confidence in the practicability of greatly reforming men, or as he more peculiarly expressed it, of rendering them “rational,” by the system of education which he recommended, from the fact that that system was based upon a radically and fundamentally different theory of Ethics from that which has hitherto prevailed in the world, because it was based upon what he termed “true first principles,” or, as he has in one place expressed himself, upon “the ALL-GLORIOUS SCIENCE of the influence of circumstances over human character.”† In this Owen has shown himself, like many other enthusiasts, to have greatly exaggerated the importance of his cherished idea, and to have anticipated from it results which it is altogether unreasonable and chimerical to calculate on.

The doctrine on which Owen desired to have education and the whole system of ethics and society founded, the doctrine of “circumstances,” as many, in common with himself, have styled it, or the doctrine of “moral necessity,” as others have commonly designated it,—the doctrine which asserts that the moral world is governed by fixed and inevitable laws, not less than the physical, that the laws of mind are as uniform and invariable as those of matter; that the idea of the absolute *free agency* of man, in respect to *moral*, any more than to merely physical action, is a *delusion*, similar, though of a directly *converse nature*, to that which causes men,

* See Book of the New Moral World, part I., ch. x., p. 42.

† See Book of the New Moral World, part vi., ch. 5, p. 219, of first American edition.

in the absence of higher astronomical knowledge, to imagine their world the center of the universe, with the sun and stars all revolving round it—the doctrine which asserts that men are no more *responsible* for their *moral*, than for their intellectual and physical natures, that they are no more *culpable* for the complexion of their *characters*, than for the complexion of their skins, that, in short, all crime, all vice, is *disease*, moral disease, disease of the soul, correspondent to the thousandfold varieties of disease of the body, and ought to be treated as such—sometimes, indeed, with the sharp *surgical* practice of the executioner's *scalpel*, the *guillotine*, or the *gallows*, but always with kindness, and in sorrow, with Christian forbearance, gentleness, and love—this great doctrine, utterly subversive, as it is, of much that has been hitherto, generally, and almost universally, received among mankind, or at least the commonalty, or slightly informed part of mankind, is undoubtedly *true*; and it is high time that the theological codes, the ethical codes, and the criminal jurisprudence codes of the world, and the whole system of the world's training, and of mutual intercourse among mankind, had been reformed, and conformed to *THIS GREAT TRUTH*. Nor can there be any reasonable doubt that important advantages would result to mankind from the general recognition of this truth—since truth must ever be supposed, in the long run, to conduce to human good, however opposite may appear its tendencies to the first and common view. But to suppose, as Owen did, that the introduction of this doctrine, as the basis of education, would completely reform mankind, render them superior to both moral and physical disease, place them beyond the reach of mental as well as bodily ills, and, in short, perfect the condition of humanity, is visionary, weak, peurile. It is to be carried away by delusion, infatuation with an idea. It is as if a man should be so carried away by his admiration for some new discovery in science, or invention in art, or some recently introduced fertilizing agent in agriculture, as *guano*, or the like, as to anticipate from it the complete perfection of the state of man, or the realization of that delusive dream of “a golden age” for the human race, which seems still to float vaguely in many minds. Many have been the discoveries, inventions, and improvements, which mankind have experienced, and yet they are far from having realized that golden age which the poets sing of, but which it is utterly unworthy of philosophers to calculate on, or to anticipate. The Copernican theory of the solar system has been promulgated and adopted, the religious reformation inaugurated by Luther has been successfully established, America has been discovered by Columbus, the *Arcana Scelestia* of Swedenborg has been published, the printing press has been invented, the steam-engine has been fabricated, and applied to locomotion by land and water, as well as to stationary machinery, the magnetic telegraph has been put in operation, and *guano* has been extensively imported from the Peruvian coast—but “the Millenium” has not yet come, the reign of perfect bliss has not yet been inaugurated on earth—sickness and sorrow, poverty and suffering, vice and degradation, injustice, oppression, and falsehood, still flourish in the world, as well as health and happiness, wealth and pleasure, virtue and nobility, justice, mercy, and truth, and will continue to flourish “unto the last syllable of recorded time,” and in despite of “all that saint, sage, or sophist ever write” to the contrary. Yet the amiable Robert Owen was weak enough to imagine that all these ills would vanish, so soon as mankind had adopted the form of society which he recommended, and had come to

be generally educated and trained according to "the ALL-GLORIOUS SCIENCE of the influence of circumstances over human character."

What visionary and extravagant ideas he entertained as to the results which might be anticipated from his system of education, it is best that we should let Mr. Owen declare in his own language. They will be manifest from the following passage of his work, already often referred to, and which will serve, at the same time, to illustrate the remark before made in this review, that the delusive idea of the perfectibility of man is generally to be found associated with the idea, that the social ills of mankind are referable mainly to political causes;* for it plainly enough marks Mr. Owen as a believer in the former of these ideas, while we have repeatedly noticed before that he was the upholder of the latter. Here is the passage, in which this amiable philanthropist, but evidently deluded enthusiast, says enough for himself to relieve us from any necessity for saying more about him: "Hail, friends of man, the approaching day, when the knowledge of the science of the formation of the character of man shall be universally known and practiced, when it shall be so well known and practiced that not an inferior human being shall be formed, at maturity, to walk the earth, or disturb the universal happiness of man, or his progeny, in whatever country or clime he may be found!"†

Of all the advocates of the communistic system of society, and of all the advocates of social reform who have aimed at impracticable results, in any form, Charles Fourier, who, as his biographers inform us, entered into life at Besancon, in France, on the 7th of April, 1772, and departed, at Paris, on the 10th of October, 1837, was the most illustrious, alike for the transcendent order of his genius, the grandeur of his general conceptions in science, and the plausibility, attractiveness, and real conformity to nature, in many respects, of that *fictitious* system of society which he advocated, as a substitute for the *natural* system, or for that actual system of society which, whatever phase it may present in any age or country, must have been, everywhere, the slow and gradual formation of the *womb* of surrounding circumstances, and is, everywhere, to be regarded as the *legitimate offspring* of natural development. While the views of Fourier coincided, in the main, with those of Owen, as, for example, in respect to the substitution of *communism* or *association*, as he termed it, for *individualism*, as to the vast influence of the *organism* of society in determining its destiny, and as to the possibility of *perfecting human society* under a proper organism, they were predicated upon a far larger range of ideas and far grander general conceptions, and were, at one and the same time, both more extravagant and yet more conformable to truly philosophical principles. If, indeed, the views of Owen, respecting the principles of society and the possibility of human attainment, appear to us extravagant, those of Fourier must appear in a high degree transcendental. If one astonish, the other must astound, us. In passing from a survey of the views of Owen, as a social reformer, to those of Fourier, we are apt to experience similar sensations to those which we might be expected to experience, if, after beholding a man on lofty stilts, stalking across hay-ricks, and performing gymnastic evolutions of an extraordinary nature,

* See ante page 278 of the present article.

† See Book of the New Moral World, part II., ch. 4, p. 59, of edition before cited.

we should turn to behold one on "seven league boots," bestriding Alpa, and gyrating among the clouds.

In Owen and Fourier the respective traits of Anglo-Saxon and Gallican intellects are indeed strongly and strikingly illustrated. Regarding Owen as an exponent of Anglo-Saxon *transcendentalism* in sociology, and Fourier, as he indisputably was, as an exponent of Gallican, the former appears very tame in comparison with the latter. And this is entirely in accordance with what might be anticipated. For the *fort* of the Anglo-Saxon is his sturdy common-sense, and application of well tried principles to practical uses, while that of the Gallican is his transcendental genius, and endeavor to compass impossibilities. In taking leave, therefore, of common-sense, of which indeed he seems to have possessed but a very small share, Owen parted from that which is the most distinctive merit of his race; and, in attempting to deal with transcendental ideas, he undertook a task for which neither he, nor, probably, any of his race, was, by any means, peculiarly well fitted. In fact, French transcendentalism, and genius for bold original conception, as far transcend the Anglo-Saxon, as transcendentalism in general transcends the ordinary habits of thought. In no less proportion do the speculations of Fourier transcend and excel those of Owen, in transcendental sociology; for of this character, undoubtedly, were the speculations of both in social philosophy.

While the views of Fourier far transcend those of Owen, in boldness, extravagance, and impracticability, they are, nevertheless, at the same time, more rational, more philosophical, and more conformable to admitted principles of science, at least in their fundamental and vital relations. In respect to these, their more important relations, they are much less liable to criticism, however much more impracticable and wildly extravagant, as they undoubtedly are, in many of their details. The different views of these two reformers, on one important point, will illustrate this observation. Thus, Owen, rightfully acknowledging the *grand necessity of reforming or improving men in order to reform or improve human society*,* weakly imagined, as we have heretofore shown, that this could be done without any great difficulty, and that he had discovered the grand secret whereby the total reformation of mankind, in their individual as well as collective characters, was to be effected. Fourier, on the contrary, while equally recognizing the necessity of either *reforming men*, or, at least, of *neutralizing their vices and follies*, which, were it practicable, would be virtually equivalent to a *reformation*, was altogether too much of a philosopher to imagine that the vices or follies of men could be really cured, to any great or general extent, or that their characters could be radically changed from what is commonly called *bad to good*. Far from it. On the contrary, throughout his voluminous and vast effusions, he constantly sets his face against this unphilosophical idea, and distinctly sets forth the opposite one, *that all the varieties of human character, bad as well as good, are immutable, and are to be accepted as indestructible elementary principles*—a great fact, indeed, worthy of a sounder reasoner than Fourier, and a fact which has been, hitherto, altogether too little known

* As elsewhere before observed, Owen does not expressly recognize or assert this great truth, in social science, which the author of this Review, here, as elsewhere, asserts in his own language, from his anxiety to make a truth of so much importance, and yet so little generally understood, or considered, as prominent as possible. Yet Owen, though he does not expressly assert or recognize the truth, tacitly and impliedly does so, plainly enough.

and considered in ethics, theology, and sociology. All that Fourier aimed at, therefore, with a view to perfecting human society, was to place mankind under such a social system, or organization—the state of harmony he termed it—as would, in his imagination, *harmonize all the vices of men*, and make them conduce to the general good, as well as to the particular happiness of their individual possessors. Thus he tells us, in a passage that will, presently, be more critically examined, for it is a pregnant one, “Tiberius, in harmony, will be just as noble, and more valuable, than Fenelon.”* Wherein he most probably displayed a lack of discernment in this remark, we shall presently have occasion to notice.

It seems to be the general opinion in regard to Fourier, that he was merely one of the many deluded visionaries, in regard to the reformation of human society, by whom the present age has been so signally infested. But such is a very inadequate estimate to form of this extraordinary, though undoubtedly deluded, man. Charles Fourier was, indisputably, one of the boldest, most original, most profound, and grandly suggestive thinkers (though altogether too dogmatical) in the dominions of fundamental philosophy and universal science, that ever lived. The controlling and paramount idea, the grand aim of all his speculations was, indeed, the realization of a perfect system of society, or, as he regarded it, a *harmonized system of society—the system of society designed by Providence*, as he supposed. But to this grand aim he endeavored, like a true philosopher, to bring the batteries of universal science, though not with the most distinguished success, by any means, nor conformably to the *tactics* of the most approved philosophical method. One of his biographers has justly said, “The writings of Fourier embrace a vast variety of subjects, cosmogony, psychology, social and political economy, historical and metaphysical philosophy, commerce, politics, and morals; in a word, all the questions which come under the head of universal philosophy have been treated by Fourier, in his peculiar style and method. It is difficult to say which of these subjects was the most important in Fourier’s own estimation. He has evidently treated them as parts of one general system of nature, united by one principle and governed by one universal law, which he names the law of movement. His system of association is, however, the work he dwelt upon with most persistency, through life, subordinating all his other studies to that science.”†

It is very difficult to determine how such a man as Fourier deserves really to be estimated. Such a combination of grandeur with littleness, of sagacity with folly, of rationality with insanity, of solid sense with wild extravagance, of undoubted love and veneration for truth with intolerable egotism and arrogance, of sound principles of philosophy with unwarrantable dogmatism, and an eminently unphilosophical spirit of valuable intuitions with imperfect conceptions for their realization, of correct general ideas with eminently faulty details, and, in short, of profound and rarely valuable fundamental principles of general science with a wretchedly fallacious and delusive system of practical conclusions deduced from them, and especially in respect to their applications to the particular science which

* See Fourier’s *Passions of the Soul*, as translated by Morell, part iv., section II., ch. 6, or Epi-
mediate chapter, as he styles it, or vol. II., page 397 of work, as published in London edition of 1851.

† See Introduction to Morell’s translation of Fourier’s *Passions of the Soul*, by Hugh Dougherty,
p. v. of London edition of 1851.

was the grand controlling aim of all his speculations, the science of sociology—such a combination of discordant traits forms a character which it might well puzzle the most profound critic and analyst of character, a Macaulay and Plutarch combined, accurately to delineate, or justly to estimate.

As already more than once remarked, in the course of this review,* Fourier bears a strong resemblance, on many important points, to two illustrious characters of preceding times, Swedenborg and Plato. In this comparison, however, it is important to remark that Swedenborg was undoubtedly the superior of Fourier, as was Plato, though not so indisputably the superior of both, despite the inferiority of his age in knowledge; for Plato always bore the part of the philosopher, even in his errors, and his transcendent reason never toppled on its lofty throne, as did that of Swedenborg, to say nothing, in this connection, of poor, egotistical, deluded, half-demented Fourier. The most important points (in addition to those before stated) on which these extraordinary characters so strongly resembled each other, were the grandeur of their general ideas with the unworthiness or fallaciousness of their practical applications of them, their boldness, their originality, their dogmatical spirit, their contempt of ordinary conventionalities, either in conduct or opinion, their profundity, their obscurity of thought, the facility with which they passed, at a single step, from the simplest to the grandest themes, as if all things were alike commonplaces in the capacious abodes of their thought, and the sublime indifference with which they discoursed about the profoundest mysteries of creation, as if they held converse alike with men and gods. On all these points the resemblance between Fourier and Swedenborg, however, is far stronger than between either of them and Plato. There is, moreover, a special resemblance between the fundamental ideas of these two, so strong as to justify the following remark of a late writer, "The revelations of Swedenborg, by which I mean his grand cosmogonic and psychological generalizations, all point to that social order which Fourier has described as the true social code pre-established for humanity by its Maker."[†]

Fourier and Swedenborg are indeed *enigmas* difficult to be solved. When we wander through the vast *platitudes* of Fourier's transcendentalism, in relation to the subversions and restorations to harmony of the universe, about "the universal language spoken in all the harmonized worlds," of which ours is not yet one, but soon to become so, under the influence of his grand revelations concerning the laws of "passional attraction," and by our "initiation into the theories of universal analogy,"

* See No. iv. of this review in Jan. No., 1860, of *Merchants' Magazine*, or vol. 42, p. 25; also No. viii. of review in September No., 1860, of *Magazine*, or vol. 43, pp. 294-5.

† See the anonymous work entitled "The True Organization of the New Church, as indicated in the writings of Emanuel Swedenborg and demonstrated by Charles Fourier," introduction to work p. 92—New York edition of 1848. It may be worthy of mention, that, when the author of this review was writing in December, 1859, the article on Grecian Sociology, in which he first assimilated Fourier to Swedenborg and Plato, he was not aware that any one had ever done so before, and felt some hesitancy as to the advisability of making the comparison. He subsequently met with the work just quoted from, in which the parallel between Fourier and Swedenborg is far more closely drawn than by himself. Similar observations to this, as the reader may have observed, the author has before had occasion to make in the course of this publication, and they seem to illustrate very correctly the habits of thought of the author under the influence of which his views have been conceived and thus far published. He has not considered, to any great extent, the opinions of others with a view to forming his own, but has, on the contrary, drawn his opinions, at first hand, from nature, in the original fountains of his own brain, and has subsequently sought to test their correctness by consulting the opinions of others. In doing this he has been gratified to find, in a multitude of instances, that his own views have been signally sanctioned by those of other and highly approved thinkers.

about the "sidereal telegraph,"* which is shortly to be established between our globe and the other planets, by means of this universal language about "dead worlds," like our moon, "dismantled worlds," like our earth, and the fully "harmonized moon-bearing worlds," with a full *cortège* of satellites, like Jupiter, Saturn, and Herschel, and the respective characters of their inhabitants, we are apt to exclaim this is the veriest grandiloquence of deluded enthusiasm or the merest rhapsody of madness; and yet, in the next moment, we may find ourselves looking forth from the transcendental heights to which we have been translated by the genius of Fourier, upon a prospect which, however transporting, wears so much the hues and lineaments of the unmistakable realities of creation, that we may be prompted to exclaim—are these, in truth, the mere ravings of insanity, or are they the grand utterances of a prophetic genius inspired far beyond the ordinary capacities of men? The like perplexity of judgment we are apt to experience in following Swedenborg through the vast, transcendental platitudes of his *Arcana Scelestia*—the greater in the case of Swedenborg, because the reliability of his transcendental revelations might seem to be attested by the many undoubted proofs he gave of miraculous or marvellous powers.

And yet, if the deductions of sober and enlightened reason may be relied upon, we need have no hesitation in pronouncing that the oracular announcements of both Swedenborg and Fourier are unreliable and delusive; that, though they may have been prophets and poet-philosophers, they were, like other prophets, by no means *infallibly inspired*; that they were highly commissioned geniuses, like many others, sent upon errands which they did not fully comprehend, but greatly misinterpreted; that, in short, they were men of extraordinary intellectual powers, which, not being well balanced, swerved greatly, at times, from the *plumb line* of reason, and fell into the devious wanderings of irrationality and insanity.

But what then? Shall we say that the utterances of such men as Swedenborg and Fourier are to be neglected because they were, on some points, deluded—insane? This would be a judgment unworthy of *idiocy*, or, in the mildest language, of *infancy*. Wisely has it been said, in every sense, that "a wise man will learn something even from a fool, while a fool will not learn anything even from a wise man." If something may be learned even from fools, may not something also be learned from madmen? Or can it be doubted that really wise men, truly discerning, calm-thinking philosophers, may learn much, and derive many valuable suggestions, from such inspired madmen as Emanuel Swedenborg and Charles Fourier †

* Let those to whom this idea of Fourier's, as to a *sidereal telegraph*, appears particularly wild and chimerical, be pleased to remember, that, when Fourier uttered it, some twenty-five or thirty years ago, the *mundane telegraph* by electricity, now fully inaugurated, would have appeared almost, if not quite, as wild and chimerical, as does, now, that of a *sidereal telegraph*. If, indeed, there are *arcenal columns*, as others beside Fourier have supposed, of electricity, for example, extending from planet to planet, and sun to sun, if it be true that all the planets and all the worlds are bound together by great *swaths* of electricity, if there are, indeed, great *gulf-streams* of electricity coursing through the vast oceans of space, and washing against the shores of every world, who shall be so bold as to say that the time may not come when men shall be so advanced in science as to transmit to distant world, and receive back, in reply, telegraphic dispatches, along these columns, bands, or *gulf-streams* of electric fluid?

† It is proper to mention that in what is here said of Swedenborg as a deluded enthusiast, and nearly affinitized with Fourier, reference is intended only to Swedenborg as the *psychologist*, and not to Swedenborg as the *physiologist* or naturalist. Swedenborg, in his great work on "The Animal Kingdom," proved himself, in every respect, a true philosopher. It was only when he undertook to soar into the psychological kingdom, or his "*Arcana Scelestia*," that he seemed to have got beside himself. Fourier, on the other hand, in all his writings, betrays the man of free ideas spun out into the most extravagant and insane extremes. The rather small proportion of really valuable truth which seems to have been committed to him, in his insane application of it, he has torn to "rags and very tatters."

That which most eminently and worthily distinguished Fourier, in common indeed with Swedenborg, was his thorough conception of the idea of universal Unity and universal analogy, or, as Swedenborg styled it, correspondence, and his constant endeavor to conform all his scientific speculations to this idea.*

"All is linked together in the system of nature," he tells us. In the same connection, and in accordance with this great fact, he asserts "that astronomy, which is the interpreter of material harmonies for the stars, is also the interpreter of social harmonies for their creatures."† Accordingly, and in conformity with this grand conception, we find him, throughout his voluminous discourses, drawing illustrations indifferently from the grandest and most insignificant objects—from the sidereal vault or a Parisian ball-room. It would be difficult to give, in so few words, a more correct idea of this distinguished characteristic of Fourier than by quoting the words of one his biographers, Pellarin, in regard to his great work on "The Theory of Universal Unity," which was first published under the title of "Treatise on Domestic Agricultural Association," in 1822—"How can we give, in a few lines, an idea of this colossal work? It is there that Fourier, taking the passionate organization of man as the archetype of the universe, according to that thought of Schelling often quoted by him, 'the universe is made upon the model of the human soul,' assigns the order of the distribution of worlds with the same assurance as if he had been present at the councils of God himself. It is there that, applying everywhere his law of the SERIES, he establishes the connection of the destinies of all beings, travenes the whole scale of creation, sometimes clearing, at a single bound, the interval which separates the two extremes, the infinitely great and infinitely small, never, however, losing sight of either in his speculations, whether the most grand or, apparently, the meanest and most trivial. In the midst of these flights through spaces where no one can follow him without dizziness, he never forgets the first immediate object of his work, ASSOCIATION."‡

These general remarks on the character of Fourier and his speculations in general, will prepare us the better, in some measure, to comprehend and appreciate his complex and impracticable views of society. Some tolerably correct general notion of those views may be obtained from the following outline. Fourier conceived that there was *some particular and special form* best fitted for human society, under all circumstances—a true, divinely-intended organization for associated humanity—a fully harmonized condition, possible for men, which had never yet been realized, or its principles known, on this globe, though long known and realized by the more favored inhabitants of many other worlds—"the fully harmonized planets," as he styled them; that this true organization for society was, however, discoverable by the inhabitants of this globe; that he had made the important and grand discovery, deducing it from the laws of universal analogy, more especially as manifested in the "passions of the human soul," that this discovery ought to have been made at least two thousand years ago, in the age of Pericles, and would have been made, probably, had not the human mind about that time fallen into a

* See *Passions of the Soul*, vol. I., p. 138, London ed., 1851.

† See *Passions of the Soul*, vol. I., p. 184, London ed., 1851.

‡ See Pellarin's *Life of Fourier*, as translated by Shaw, p. 42, New York ed., 1848.

languor and feebleness from which it has been slow in recovering; and that, moreover, that the discovery would have been made much earlier than that, and indeed, that mankind would, long before that time, have been brought into the true social style, or state of social harmony, instinctively or naturally, and without the aid of scientific discovery, by the *improved material condition of our globe*, if it had not been for the great catastrophe which it experienced in the deluge, which was occasioned, as he informs us with the most serious audacity, "by the death throes of the moon," which occurred about that time, and which so vitiated the "aromas" of our planet as to swell the race of serpents up to one hundred and thirty tribes, and that of bugs to forty-three varieties, and to produce other deplorable results upon the animal, as well as vegetable, kingdom, and greatly to retard the progress of mankind towards *harmony*; that in consequence of this great catastrophe suffered by our globe, it would have been at least two centuries yet before mankind could have attained the state of harmony, had it not been for the grand scientific discovery of himself, Fourier, which has opened the way for them to enter, at once, into a state of social harmony and terrestrial bliss.

Fourier imagined that in order to ascertain what this true form of society was, it was only necessary to look into the human soul, and ascertain how that was organized, what were its essential and elementary passions or impulses, (substantially the idea before expressed by Plato,* but much more elaborately, and at the same time less *scientifically*, carried out by Fourier;) that, inasmuch as all things are linked together in nature by the chain of universal analogy, the real structure of the soul might be discovered and illustrated by an analysis of the gamut of the musical notes; that as every complete musical octave has *seven* active and essential notes, and *five* neuter or accessory ones, making in all *twelve* distinct notes, so the human soul has *twelve elementary notes*, passions, or impulses, five of *sense*, four of *affection*, and three of *order* or *system*, all of which require full development; that these twelve elementary passions, however, by their various combinations, in different individuals, are capable of producing a far greater number of distinct individual characters; that in order to form a perfect social organism, or complete "social man," or, in other words, one "entire human soul," it is necessary to bring together all these distinct varieties of individual characters or soul in "symmetrical distribution," to harmonize them, and give full play to all their different leading traits; and that there are, as he has discovered, (though by what process, either of *induction* or *deduction*, he has made the discovery, he does not deign to inform us,) in the human race, eight hundred and ten different species of individual souls or characters, male and female, the males exceeding the females about as twenty-one to twenty.

Upon this meagre induction of speculations, or dogmatical assumptions, almost wholly unsustained by any practical observations or experiments, Fourier concluded that the perfect and complete human society or social unit, which he termed phalanx, (*la Phalange*) comprised just eight hundred and ten persons, each one of which should represent some one of the individual varieties of mankind, so long, that is, as they should all be in health and of an age fit to perform industrial duty; but that, inasmuch as this could not be depended upon, and eight hundred and ten per-

* See article on Grecian Sociology, vol. xiii., p. 22-3-4, of *Merchants' Magazine*.

manently active persons could maintain at least twice their own number, about twice that number, or sixteen hundred and twenty persons, of all ages and sexes, were necessary to form a complete "industrial hive," social unity, or phalanx. Fourier imagined, in the plenitude of his childish simplicity and dogmatical arrogance, that mankind thus brought together in distinct self-sustaining communities of sixteen hundred and twenty persons, according to their proper affinities and harmonies, and being called upon to perform those offices for which they had both a peculiar taste and talent, would find labor attractive, *travail attrayant*, and would need no extraneous stimulants to industry. He was, moreover, weak enough to imagine that full play being thus given to all the natural passions of men, and that too in what he called "harmonious development," instead of the present "subversive development," as he termed it, so far from experiencing any injury, from this unrestrained license of human passions, *duty harmonized*, would realize extraordinary prosperity and happiness, and find, in this life, enjoyments not unworthy of a terrestrial paradise.

Surely, views so wild and impracticable, however plausible and captivating in some of their aspects, need but little comment. They will be dismissed from further consideration here, with the remark that, in entertaining them, Fourier committed two grand errors, which it may be worth while briefly to notice, the more especially as they are errors that are entertained, either in whole or in part, by a multitude of false reasoners, beside Fourier, in social science, and other sciences intimately related to mankind.

I. It was a grand error in Fourier to suppose that *because there may be, and doubtless is, a natural, true, and proper system of society for mankind, this system is some other than that which we see, and to which men have taken spontaneously, under the various circumstances by which they have been surrounded.* How else do we or can we ascertain the *natural, true, and proper* habits of any plant or animal, than by observing what are its *actual* habits? And why does not this rule apply to man, as well as to all other animals and vegetables? Why is *instinct*, which is admitted to be an infallible guide for all other animals to their true destination in life, unreliable only in man? It is a very great and serious error in philosophy to suppose so. The instincts of man, though more indistinct than those of the lower animals, are, after all, the most reliable indications to him of his true direction and destiny; and it is altogether probable that much more serious errors are committed by men from defects of *reason* than of *instinct*. Indeed, no one was ever a more strenuous advocate of this idea, in the main, than Fourier himself, though he loses sight of it entirely when it fails to chime with his fanciful and eminently contracted theory. Thus we find that the main point, in the existing order of civilized society everywhere, against which he directs the batteries of his indignation, is its systematic endeavor to repress the natural passions of the soul, to which he aims to give full play, confidently asserting their divinity of origin and destiny, from the simple fact that they exist.

The real secret or fundamental source of Fourier's error on this point, was the mistake, so common with *half-way* philosophers, and especially French philosophers, of presumptuously undertaking to pass final judgment on nature from his own low stand-point, and audaciously assuming

that this and that are wrong, because to his contracted view it appears so. Thus we find him, with the most astounding audacity and most imaginable assurance, asserting "that man has been exceedingly ill used by nature," because he cannot see so well as the eagle and the cock, the owl and the cat,* and that this ill usage of man ought to be rectified, and will be, so soon as our planet gets *fully harmonized*, which it will do in two centuries more at the latest, when man will attain a power of vision far exceeding that of all the lower animals, as he ought certainly to have.

Thus, again, we find him, with less audacity and transparent folly, asserting, in the passage already quoted in part, "Tiberius, in harmony, will be just as noble, and more valuable, than Fenelon; you must then accuse, not Tiberius, but civilization, which knows not how to make use of this rich character, which is an ambiguous trimixth."† It seems never to have occurred to Fourier, that perhaps Tiberius was already in harmony, and did not need his ridiculous harmonic principles to render him so. Fourier, with all his vast romancings through space, did not have comprehensiveness enough of apprehension to comprehend the idea of a *grand concord of discords*, nor to discern that, most probably, to an all-seeing eye, and an all-discerning mind, the universe is already *in harmony* with all its lights and shadows, pains and pleasures, goods and ill, truths and falsehoods. He was not really a profound enough reasoner to comprehend that if, indeed, he could exterpate all lying, all falsehood, from men, as he aimed at doing, he would perhaps have dried up one of the grand fountains of human happiness, and left to human life too much of the *sweets* without the requisite *acidities* of creation. His was not the soul to comprehend the profound language of Bacon, a true master of the human soul, "A mixture of lies doth ever add pleasure. Doth any man doubt that, if there were taken from men's minds vain opinions, flattering hopes, false valuations, imaginations as one would, and the like *vinum Daemonium*, (as a father calls poetry,) that it would leave the minds of a number of men poor shrunken things, full of melancholy and indisposition, and unpleasing to themselves?"‡ Fourier does not seem to have been at all conversant either with the grand sentiment of Pope—

"All nature is but art unknown to thee;
All chance, direction which thou canst not see;
All discord, harmony not understood;
All partial evil, universal good;
And spite of pride—in erring reason's spite,
This much is clear—*whatever is is right.*"§

It is true that Fourier has presented this unphilosophical idea, *that there is something essentially wrong in the existing order of things*, whether in Sociology or in Physiology, in a very plausible form, and such as may serve to stagger criticism for a moment. He maintains that mankind are

* See *Passions of the Soul*, as translated by Morell, part I., ch. 2, or vol. I., p. 22, London edition of 1851.

† See same work, part IV., sec. II., ch. 6, styled Epimedeate Chapter, or vol. II., p. 397.

‡ The author is not able to refer to the work in which this language is used by Bacon, though it bears the unmistakable impress of his genius. It was met with in a note to an English translation of Goethe's *Faust*.

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not as yet in their *true natural* state, or state of full normal development. He maintains, as a part of his general system of cosmogony and fundamental philosophy, that both the material and humanitarian or moral systems of the universe are subject to alternate periods of *subversion* and *harmony*, the former of which he also calls *transitions* and states of *limbo* in some places, while in other places he attempts to draw important distinctions between subversion and transition—that in these periods of subversions, the springs of universal movement, in the passional and material world alike, operate in subversive play, and in direct contradiction to their natural course, producing, for example, night instead of day, winter instead of summer, caterpillar instead of butterfly, comet instead of planet. He maintains, further, that our planet, and all its inhabitants, are, as yet, in the *subversive* state, or state of *limbo*, and have not yet attained to their true normal development. He vouchsafes, however, to inform us, that this state will not continue much longer—that the human race is destined to remain 80,000 years on this globe, about 6,000 years in a state of *anterior* subversion, 4,000 in *posterior* subversion, and 70,000 in *twenty-four different phases of harmony*, or true humanitarian life—that this period of anterior subversion is now near its close, and mankind are nearly approximated to the period of full and blissful harmonic development.

In reply to these grandly romantic speculations, it is sufficient to say that they are wholly unsustained by any data sufficient for scientific conclusion, and that they are rendered only a little plausible by a few strained analogies, while far more numerous and important ones, of a contradictory bearing, have been wholly overlooked. One only of those contradictory analogies, and one which is far more germane to the point in issue than those cited by Fourier, will be noticed here. According to Fourier's favorite idea of universal analogy, and indeed by his own express assertions in various places, *the life of the individual man is the type of every other*, and of course, more especially, of the life of the race of mankind. Now let us inquire how does the analogy drawn from this individual life of man testify as to Fourier's fanciful and delusive idea about 70,000 years of harmonized bliss in the lifetime of the race. Is there any essential difference between the functional life of the individual man in the different ages of his existence? Is it not the same in the boy of *five* years, the man of *twenty-five*, and the veteran of *seventy*? Is not man in the prime of life, the vigor of manhood, still liable to pain and penury, and "all the countless ills that flesh is heir to," as well as in youth and old age? Where, then, is the probability or rationality of the idea that the *race of mankind*, during the 70,000 years of their middle age, are destined to enjoy a state of harmonic development directly the reverse of that which they have experienced during the earlier period of their existence already past? It is a peurile imagination, utterly unsustained by scientific testimony, and unworthy of a philosopher.

II. It was a second grand error in Fourier, and greater than the first, to suppose that, if indeed there is any other right state of society than that which we find actually existing in its different phases among mankind, either he or any other man can construct it artificially, or by the aid of merely scientific principles. This is about as wise as to imagine that an individual man, a living human soul, can be made artificially, and by means of a scientific calculation of the exact quantity of carbon, hydro-

gen, nitrogen, and other ingredients it takes to form a man. We know that human ingenuity is adequate to do much, but it can never actually create life, either vegetable or animal, individual or social, by any artificial means or scientific appliances, however skillful. It may make a steam-engine and an automaton, but it can never make a man, or a society of men. All it can do, towards either of these last named results, is to perform certain acts which will set in motion, or bring into play, certain occult and profoundly unknown forces of nature. It can never accomplish anything in this line, except by drawing on the vast resources of nature, her boundless skill as exhibited in her eternal workshops, and the result of her agency in such cases can never be calculated, with any certainty, by human intelligence.

No human society was ever yet the creation of human ingenuity solely, nor to any other extent so, than to a very limited one. There is, in all human societies a great deal more that lies beyond the reach of human creation and control, than within them, and the really most important part of a nation's laws will, accordingly, be found to be those that are not written. A nation or society cannot be created *de novo* or *ab origine*, conformably to the views of any human designer. Nor can it ever be ushered into existence, except after a long and elaborate process of anterior formation, which must forever defy the utmost human ingenuity or wisdom to calculate the results of.

In short, *incubation is indispensable to the creation of national or social life, as well as of individual*—nay, moreover, *incubation, gestation, and parturition*. There is no other way of creating men than the natural one—by begetting babies; and the way of creating or begetting empires, nations, or societies, is like unto it. In either case, the little that human ingenuity can do towards controlling the result aimed at is as nothing compared with what it cannot do. By strict attention to the laws of *genealogy* in the case of individual life, and of *ethnology* in the case of national, and to the *influence of circumstances* in both cases, something may be effected. If, for example, you wish to create a certain style of man, all you can do is to unite in wedlock a certain style of man to a certain style of woman, and attend strictly to the health and habits, mental and bodily, of the woman, during the period of her gestation. If you wish to create a certain style of society, or nation, all you can do is to unite a certain style of men to a certain style of *local circumstances*, having regard to soil, climate, geographical feature, and general adaptability as to occupation, and then attend to the habits of your society, as far as possible, during its *embryo* state, or the period of its *gestation*. This is all that the most renowned founders of States have ever done, or been able to do. What did Alexander and Peter the Great, in founding their renowned cities of Alexandria and Petersburg? The one merely united the Egyptians and Grecians to the *local circumstances* surrounding the mouth of the Nile, on the Mediterranean Sea; and the other united the Russians to the *local circumstances* concentrated at the mouth of the Neva, on the Baltic. In short, all they did was, *they married the RACE to the CIRCUMSTANCES*. Nature did all the rest. Had Peter colonized his city with Egyptians and Greeks, or had he located his Russians at the mouth of the Nile, the result would have been very different from that which has followed his work; and all that Fourier and other presumptu-

ous aspirers to the power of dictating the destiny of humanity may have striven for, to the contrary, would have been vain and futile.

What, again, could the utmost human sagacity and ingenuity have done, towards designedly controlling the destiny, or forming the character, of one of the latest born and most distinguished of existing nations, now threatened, apparently, with premature death—the Americans? It could have done nothing more than look to the character of those who sailed in the *May Flower*, and those who settled at Jamestown and other points, attend to the local circumstances of their places of settlement, and the various political, as well as local influences, by which they were surrounded during their long period of *gestation*, extending through nearly two centuries, until the nation was actually *delivered* on the 4th of July, 1776.

Fourier needed council from the great mind of Bacon, and the idea with which he seemed to be thoroughly animated, in all his philosophical discourses—that *the subtlety of nature greatly exceeds that of man*—and that, consequently, however skillfully man may contrive, he must ever fall behind the skill, the subtlety, and intricacy of nature. And yet it should seem that Fourier, of all men, ought to have been one of the very last to need council on this point, in respect to the organization of human society; for this much must be accorded to him, that he seemed to appreciate well its *vast complexity*, at the same time that he wretchedly failed to appreciate the *vast difficulty* and utter impracticability of its being mastered or controlled by human ingenuity. While most analysts of society have been content to reduce it to three main elements, as the *good, bad, and indifferent*, the *rich, poor, and middle conditioned*, or the like, Fourier had reduced the composite structure, of what he calls truly harmonized human society, to not less than 810 different elements, each one of which, he maintains, must be present, in its proper proportion, and without any other element, in order to constitute such a society. And yet he maintains that human ingenuity is adequate to the stupendous work of organizing such a system of society, that his sagacity and skill could easily compass it, and that mankind and civilization, and all its philosophy, were despicably stupid, because they would not commit themselves to his directions. Was there ever a doctrine more completely suicidal? Was ever delusion more evidently manifested? Assuredly, Fourier, like many of his brother reformers of society, belonged to that class, of whom it has been written, “Esteeming themselves wise, they became fools.”*

* The foregoing outline of Fourier's views of society have been condensed almost entirely from his work on “*The Passions of the Human Soul*,” through which they lie scattered in desultory and vast confusion. Of this work, Mr. Hugh Dougherty, one of the expounders and biographers of Fourier, has said, “In a purely scientific view, the analyses of the passions may be deemed the most important of his works, since he builds his whole social theory, and all his scientific synthesis, on this analysis.” See Dougherty's Introduction to Morell's translation of the *Passions of the Soul*, page 5, of London edition of 1851.

ART. II.—CONSTRUCTION OF STEAMERS.*

CONSTRUCTION OF STEAMERS—SIDE WHEELS AND SCREWS—WHEEL SHAFTS—SCREW SHAFT—ELEMENTS OF THE SCREW—STERNAGE—CONCLUSION.

A PROMINENT consideration in constructing steamers is to obtain in them the least resistance proportional to the displacement, consistent with the strength and stability requisite for the service to be performed. If this service regards only speed under steam alone, and is to be performed in smooth water, the resistance may be reduced very much by giving great length as compared with the beam or breadth. In this manner the displacement may be doubled without an increase, but on the contrary a reduction, of resistance, by rendering the water lines "easier;" that is, by reducing the angles with which the vessel enters and leaves the water. For smooth water, there is scarcely a limit to the application of this principle, except steering in crooked channels and turning in comparatively narrow places, also that imposed by the friction arising from length.

But these excessively long vessels are objectionable as steamers on the ocean for several reasons. Of these, one is the enormous weight of the engines and boilers concentrated within a small space near the center of the vessel, which, when the two extremities are sustained by the tops of two waves, being partially forsaken by the trough of the sea, will settle, and occasion leaks, unless the vessel is constructed with an extraordinary degree of strength proportioned to the length.

Again; if a very long vessel, heading a heavy sea, is raised at the bow by a wave, and that wave passes under her to the center, sustaining that part, the bow will overhang the wave and drop, opening the butts of the planks, and occasioning there also strain and leak.

The kind and degree of strength necessary to prevent the extremities and the center of a long steamer alternately settling in the manner described, are given chiefly by the side planks. If the sides are deep, so that this planking has great breadth, the vessel will be correspondingly strong—otherwise weak. Several long river boats, with no great depth of sides, have broken at sea and foundered.†

A limit to the strength produced by depth of sides is prescribed by the practicable height and depth of the vessel, which must bear a certain relation, and both may be too great; one for stability and as affording an object for opposing winds, and the other for draft of water and passage of bars found at the entrance of most harbors.

A second objection to these excessively long vessels is, that if in a gale steam fails, they fall into the trough of the sea, and there remain in spite of every effort hitherto tried, sails or drags, and wallow until their decks are swept, and they founder. The San Francisco and Central America are memorable instances.

A third objection is urged in certain cases, as men-of-war to compose

* Steam for the Million: a Popular Treatise on Steam, and its Application to the useful Arts, especially Navigation. By J. H. WARD, Commander, U. S. Navy. New York: D. Van Nostrand.

† The "hog frame" is an expedient to compensate for want of depth of sides, but at sea is not reliable. The bow and stern, too, not being "water borne," are hung by braces, and other expedients, which also, although well enough in smooth water alone, and well enough as auxiliary to deep sides at sea, are not there a good sole dependence.

the body of a fleet, which it is desirable to compact and maneuver quickly, and within a reasonable space.*

In regard to size of vessels, their capacity to carry fuel, power, &c., is as the displacement. The resistance, to which the power must be proportioned, is as the area of the greatest immersed section. But as vessels increase in dimensions, their forms being similar, the capacity increases as the cube of any given dimension; whilst the area of the immersed section, consequently the resistance, increases only as the square of that dimension.† Hence, increasing the size of a vessel so as to double her resistance, and double the cost of running her by doubling the quantity of fuel consumed in a given time, more than doubles her capacity to carry freight, fuel, &c.; which explains why large vessels of any kind are found most profitable where there is employment enough for them, and why large steamers can keep the sea longer, and accomplish longer voyages with the fuel they are capable of carrying, than smaller steamers.

Let there be taken, for example, two vessels, one 30 feet wide, 150 feet long, and drawing 10 feet water; and another 40 feet wide, 200 long, and also drawing 10 feet. The displacement (or capacity to carry) of one is represented by 45,000, the product of the three measurements; and the displacement of the other by 96,000. The relative resistances are represented by 300 and 400; that is, the capacity of the larger vessel is more than 100 per cent greater than the smaller, and her resistance, and consequently her power and expense, are greater by only 33 per cent.

But, by art. 3, the depth must grow with the length, at sea, for strength. It must also increase in order to give lateral hold in the water to correspond with the lateral exposure to the force of both wind and sea, for otherwise the drift is such that, however the ship may head, no one can know the actual position on the sailing chart, owing to this great and uncertain drift as a cause of deviation. Hence the gain of speed by length, although always great, is in practice reduced below the figures of the preceding paragraph.

In proportioning engines to vessels intended for steaming only, it is customary to allow a horse power for every one, two, or three tons—giving the highest proportion to smallest vessels, for reasons noted in art. 5. There is a growing partiality for high proportional power, especially for vessels engaged in the transportation of passengers, yet there is much argument as to what the limit of this proportion should be. A correct solution depends on the purpose of the ship, whether for man-of-war or

* Long sailing ships have relatively an advantage in speed, pitch less, and are much more weatherly, because the lateral resistance is greater proportionally to the longitudinal, and because they brace the yards sharper; but they won't stay so surely unless the head yards are checked in, because they lose headway before the yards braced extra sharp catch aback. They cannot either be got off the wind in a squall, therefore need more careful watching. They require an inconvenient space staying, and more for wearing—an inconvenience especially felt in fleets.

The English complain bitterly of the unmanageable character of their new long steam frigates, copied after ours, which is attributed to length. Their long rows of battery on a single deck, are ridiculed as "streets of guns." In truth, they would, in line, fare badly against the concentrated fire of a two or three decker; and will, if so be it turns out by actual war experience that the line system is to continue. This, however, by the best opinions, will not prove the case. If it does not, and the *mélée* system prevails, then ships fighting under steam, will as often be engaged on both sides as on one, obliging them to fight both batteries, each with half a crew, as rapidly as one battery can be fought with a whole crew. As guns are now mounted, this would be impossible. The author is prepared with a means of meeting this new necessity, and he will propose it in due time.

† Solid measures increase with the cubes, and superficial as the square of a linear measurement. Hence, while the space in the ship increases as the cubes, the surface, on which the carpenter works, increases only as the square, which accounts for the reduced proportional cost of large ships; and it would be less than it is, except for the scaffolding and hoisting on the stocks.

not. If it be speed, dispatch, packet service alone, sacrifice largely everything to speed; otherwise not. And so with such men-of-war as are built for speed, to run, or principally for that. Or if they are built principally to claw off a lee-shore, as some strangely contend, then give them a power adapted to this main object of their construction, otherwise not. And if they are to perform service about home exclusively, they need one construction and proportion of steam power to tonnage; that it should be primary, not secondary or auxiliary to sails; otherwise the reverse. For fighting and for distant service, ships undoubtedly require battery, spars, and subsistence, which are opposed to excessive proportional steam power, or the weight and space it occupies.

The law of power in its relation to speed is, that power increases or decreases with the cube of the speed; and calculating, the statement is, as the cube of a given speed, is to the power which by experiment produces that speed, so is the cube of any other required speed, greater or less than the given one, to the power which will produce that required speed.

Thus, if it is known that in a given case 500 horses power will produce a speed of 8 knots, and it is desired to know what the increase of power must be to increase the speed $\frac{1}{2}$, or to 10 knots, the statement will be, as $8^3 = 512$, is to 500 (H. P.), so is $10^3 = 1000$, to 976 (H. P.) or nearly double the power. So that doubling the power produces only $\frac{1}{4}$ increase of speed. By trying other cases it will be found, uniformly, that doubling the power gives about $\frac{1}{4}$ increase of speed. Hence a moderate increase of speed involves an enormous increase of weight, and demands room correspondingly for engines and boilers, and more yet for coals.*

In regard to the water lines of vessels, experiments long ago determined, that the form of least resistance had its sharpest end forward. But short sailing vessels so built, buried, and have even run under and foundered. Long vessels are in no such danger. Nevertheless, it is but recently that constructors have boldly conformed practice to theory, and brought the dead flat amidships. Mr. Steers led in this step, and hence mainly his success. Steamers, which are such exclusively, are often much fullest aft.†

Ships, of course, freight around the weight of their hulls,‡ and it is

* It is truly desirable that the public, which properly regards speed as the chief merit in packet and passage steamers, should regard men-of-war with more reasonable and charitable criticism, remembering they are designed for distant, long-continued cruising, away from supplies of fuel; and besides engines, must carry heavy batteries, heavy masts and spars, subsistence and water for large crews for many months—a lading wholly incompatible with the lean water lines, and the heavy boilers and engines, which conduce to mere speed.

The proportions of horse power are given in the books as relating to tonnage, sometimes to displacement, and sometimes to area of immersed section; and in reading intelligently, it is necessary to know which is meant, neither being expressed.

So also there is, beside the calculated and the indicated horse power already explained, another one spoken of in English books, termed the "nominal horse power," and, in reading intelligently, it is necessary to know also which of them is meant, when neither is expressed.

Nominal horse power, as used in English publications, expresses the relative capacities of cylinders, and the work the engine will do with some certain effective pressure upon the piston per square inch, the books say 7 lbs., (Bourne, p. 50,) but is no measure absolutely of the work an engine does.

† Large ships with short floors invariable fall at sea, though fit for smooth water.

‡ On this principle, of the impossibility of freighting all around the globe any number of vessels loaded with their hulls, the "coat-of-mail ships," now bugbearing the world, will prove wholly impracticable as cruisers, although for special service against a neighboring belligerent power, they may no doubt prove effective, more particularly if ever it turns out that they are made impervious to heavy shot.

So also the "steam ram," which must be of enormous weight and strength, although of some service about home, (yet even then far short of what its cost should render it,) may very likely turn out a "sheepish" affair. Certainly it should be permitted to sink but one vessel, and that one

desirable that so far as possible each part of the ship should carry its own weight. This the bows and sterns of very long sharp ships do not; in other words, those parts are not water borne, but are as much hung to the body, as a horse's neck and head, and are to be held up by a heavy and expensive constant support. This very difficulty imposes another check upon length, and still more upon sharpness; for art must yield to nature—planks and bolts to gravity.*

It is useless to complain of the expense of a steam navy, for there is no avoiding the greater first cost of ships, the more frequent repairs arising from the shake of the engines and the rapid decay caused by heat, or the larger amount required for pay. The *Wabash*, after but two years' service, shows in her wales, midway of the ship, only a shell one inch thick of sound wood, although at and towards the extremities, away from the heat, the planks are good the whole thickness. This may in part be due to unseasoned stuff used in the hurry of building, for undoubtedly steamers require the very best of seasoned material—at least in the middle, or waist.

The side wheel, is to the screw under steam power, what the paddle—more properly a pair of paddles, or banks of oars, are to the scull under hand power. And the parallel only fails, because so much hand power cannot be brought to bear on the scull as on oars, whereas an equal steam power can be brought to the screw as to side wheels.

Even if the parallel did not fail for the reason mentioned in the case of hand power, and so much hand power *could* be brought on the scull as on oars, relying alone on the "ash breeze," a figurative term for the oar, they would be voted preferable to the scull in smooth water; although in rough water, or co-operating with sails, all experience demonstrates the imperfect, awkward action of oars.

Throughout nature, where motion alone is the object, the rotatory is that which is always witnessed; and in art, where motion alone is the purpose, nature is imitated with analogous benefit. Under such circumstances, then, there is an advantage in bringing the rotation of the crank shaft to act directly as propulsion by the paddle boards or buckets, rather than indirectly and obliquely by the screw.

The screw, therefore, like all intermediaries, like for example the gearing article 17, page 62, may be regarded as a necessity, introduced to avoid some difficulty otherwise unavoidable, or to gain some advantage otherwise unattainable; the particular difficulty in this case to be avoided being the unequal action of side wheels in rough water; and the particular advantage sought being a union of the elastic force of steam produced by artificial means, with the natural force of the winds on sails, which is a result of gravity. Article 1, page 9.

None would think of any other appliance for speed on a railroad, than the driving wheel acting directly by traction. Only where traction is

should take the ram down "by the horns," head foremost. In war, defence always keeps pace with the attack, and following the ram's introduction, will be appliances for grappling it on the instant, if not before all the fatal damage is effected, yet before the victim can sink, so that when the ram takes that projected "turn back," it will find "its horns caught in a thicket"—that it is easier to get into a scrape than out of it. Will the rams carry their extremities in a heavy sea, or will the steel-plated ships carry theirs as cruisers?

* The mania for increasing length will hardly be cured, until after more disaster. But unfortunately the victims will be a simple public which knows no better, intent only on going ahead, and not the capitalist and architect who don't go to sea in the vessels, only order and construct them, under the united impulse of cupidity and vanity.

insufficient, it has been proposed to overcome inclined planes by a screw. So afloat, on smooth rivers, where an even keel and even action of the paddles is always possible, the case is very near akin to that of railroads. Hence on rivers, side wheels are usually seen—screws never. True, a lack of depth or draft of water to submerge a screw, is an additional reason for its absence from rivers; but without that reason, it yet wouldn't be there.

Early experimenters in this country, those coeval with Evans, Fitch, Stevens, and Fulton, essayed with the screw, and developed its advantages in deep water with a sufficient draft. But in shoal water, it could not be used even if desirable; and in smooth water it was not desirable. Hence the side wheel got the ascendancy in America, where shoal, smooth rivers and bays were the field; an ascendancy which doubtless the screw would have got instead, in England, where the boisterous channels and their deep water were the field demanding steam power to navigate them. Naturally, in copying from us who led in steam navigation, the English took the side wheel, which was also best adapted to the Boulton and Watt's form and style of engine, then universal; and although the screw proves now to be best adapted for channel service, it is not wonderful that time alone could break the hold which possession gave upon prejudice for the side wheel, as it has now done there, and also begotten a new form of engine, the screw engine, adapted to the work required. Nor is it wonderful that we are behind England in screw propulsion, and even for ocean navigation reluctantly abandon the side wheel, originating with, and handed down to us by an ancestry whose memory we venerate, and whose genius and perseverance merit our own, and challenge the world's admiration.

Side wheels, to operate with only small loss of power consequent on the buckets or paddle boards (when fixed to the arms of the wheel) entering and leaving the water at an angle with its surface, have very great diameter; an evil of which is, that it causes lofty wheel houses, and great retardation from head winds, as well as injury to the stability of a vessel.

The English very generally escape this evil of retardation and instability, by smaller side wheels, with swiveled buckets or paddle boards, so turned, by a "feathering wheel" on the shaft, as to preserve them always in a vertical position. Hence they enter and leave the water vertically, however great the dip of the wheel; whereas, the fixed buckets ("floats,") even of a larger wheel, increase or decrease their angle of entrance, to some extent, as the dip increases or decreases; which dip is, of course, at the beginning of a long passage, very great, and at the end very light.

So also when the lee wheel of a side wheel sea steamer under sail is buried greatly, a similar action takes place; that is, a great loss of power, by the fixed buckets entering and leaving the water with an action which, to the extent it is vertical, is not propulsive, therefore lost; and which, if a wheel were buried to the shaft, would be *wholly* vertical. With the swiveled (the English call it the "feathering," as distinguished from the fixed, which they call the "radical") paddle, what force that paddle does exert, even in the extreme case supposed, is horizontal, and in no degree vertical.

Under canvas, the weather wheel dips lightly in proportion as the other dips deeply, and it is then of little account whether the paddles of the

weather wheel are "radial" or "feathered." Under great heel, therefore, with side wheels there is great loss of power; and under any heel, the loss is proportional.

But there is another evil with side wheels, viz.:—Back water action of all the paddles, whether "feathered" or "radial," attached to paddle arms which enter or leave the water at any considerable angles of obliquity. And this evil is greatest with small wheels. In fact, but for "slip of the wheel," which is the difference between speed of wheel and speed of vessel, and usually about 20 per cent or $\frac{1}{5}$, every paddle except that on the vertical arm would be inoperative, or else back water. Any one arm entering or leaving the water at 45° or more, may be reckoned surely to carry a back water paddle; and probably those entering with a less angle. When a vessel by rolling, or heeling under sail, immerses a wheel more or less, but to a varying extent, there is constantly a loss of power in accommodating speed to this back water.*

Therefore, whilst in one respect the large side wheel with fixed or radial paddles is best, and in another respect the small wheel with swiveled or feathered paddles, it may unhesitatingly be declared, that neither of them is, in any respect, proper or fit for use as a means of propulsion in a sea way, or in conjunction with sails, or for a voyage—the draft of water in the beginning and in the end of which must be greatly different; in short, for ocean navigation.

The screw is altogether free from influence by the more or less deeply laden state of a vessel, by heeling under canvas, or by rough seas, especially when in vessels of 15 feet draft and upwards. With less draft, sometimes the pitching motion is such as to throw a two-bladed screw wholly or in great part out of water, and occasion not only some loss of steam, but a dangerous and irregular speed of the engine. Devices for the spontaneous correction of this difficulty, peculiar to a screw vessel of light draft, are proposed. All of them act on the principle of the "governor." See note, page 76.

In shafting, several precautions are necessarily observed, as important; and that most so, is against damage from working of the upper frame of the vessel, and unequal settling of parts, particularly the wheel guards.

Each one of the side wheels has its separate shaft, with a main bearing at each end; the outer one on a heavy timber which spans from the extremities of the two guard beams, and the inner one on a crank frame erected from the floor of the vessel; or when there is but one engine, this crank frame is built up from the keelson. Both these bearings, by which the vessel is at last driven, are well braced forward and aft.† The shafts being of wrought iron, (forged under steam trip hammers,) each has a crank arm "shrunk on" to its inner extremity, and the connecting rod of the engine is strapped to a short "crank pin" between them, reaching from one crank arm to the other. But this crank pin, which is a firm

* There is an analogy between this back water action of a paddle, and the cycloidal motion of any given point on a wheel rolling over the ground; and an explanation on that principle is often given. But there is a simpler one, and it is useless ever to go deeper in the well of science, than is necessary to find all the explanation a case requires.

Resolve the oblique motion of a paddle where it strikes the water, into its vertical and horizontal components, and if the horizontal is less than the speed of the ship through the water, there would be a back water action but for the slip.

† Each wheel shaft has also a spring bearing at the vessel's side, but it is not arranged to support the middle of the shaft when the extremity settles. It has though, firm braces both forward and abaft it.

fixture to one of the crank arms, is neither keyed nor in any way immovably secured to the other; because, if opposite guards settle, it will occasion the two crank arms to spread apart, which they must be free to do without occasioning strain or fracture. This necessary play is given, by what is called a "drag link," which any person ought by inspection readily to comprehend the use of.

When there are two engines, an intermediate shaft is put in between the starboard and port crank frames; and each extremity of this intermediate shaft carries a crank arm, which is provided with the drag link.

The screw is either attached, or fixed to a longitudinal shaft, extending from just abaft the engine, (placed usually in men-of-war just abaft the mainmast, which steps between the engine and boiler*,) along the shaft alley, over the keelson, to the stern, where it passes out by an orifice bored through the dead wood, and in case of a lifting screw, through the main stern post. The shaft has a principal main bearing in the stern, and another principal main bearing at the other extremity near the engine; where it has also a circular clutch piece, corresponding with and fitting loosely to another clutch piece on the after extremity of a crank shaft, to which the engines connect. When the crank shaft revolves, it communicates motion to the screw shaft by means of the clutch.

The crank shaft is usually forged all in one piece, having two cranks set at right angles to each other, so that when one engine is on the center or dead point, the other is at the half stroke; the effect of which relative disposition of the two cranks is, that one engine assists the other over the dead point, and evenness of motion throughout a revolution is maintained. These cranks, like all others, are carefully counterbalanced.

The clutch, by its two pieces not fitting closely, allows for the "hogging" of the ship, that is settling of the stern and with it the after end of the shaft, without a strain; in which respect it accomplishes the purpose of a drag link to the side wheel crank. The screw shaft, being very long, is forged in several pieces, never exceeding 15 feet, and there is a main bearing where the lengths join, also an adjustable spring bearing under the middle of each length.

In case of the side wheel shafts, there are four main bearings to sustain the weight, besides the two spring bearings on the sides, and the force of the paddles results horizontally upon these several bearings, to drive the ship. But this force on the shaft being divided among the whole six bearings, that exerted on any one of them is not great. But with the screw shaft it is different. The whole propelling force of the screw, by which it acts on the ship to drive her, which force is termed the "thrust," must be exerted either against the stern post or frame, where lubrication would be impossible, and the parts soon wear out; or endwise on the shaft to drive it in, either against the clutch, or against some

* Nothing in the economy of a steam man-of-war's arrangements, has been more considered, or given rise to a greater variety of practice, than to step the mainmast so as to bring the step, where it belongs, down on the keelson, and not on the berth deck, or on a gallows frame over the engine, or the screw shaft, or to straddle them; to permit the center of gravity of the boilers and engines as a whole to lie near the center of gravity of the ship, and at the same time to have no considerable loss of space between the boilers and engines, and give likewise no unnecessary length to the main steam pipe, which by length is more exposed to damage by shot, and to condensation of steam passing through it from the engine to the boiler; to throw the smoke pipe so far forward that it will not interfere with boarding the main tack on a wind, and yet leave the usual place for stowing the launch free for that purpose. These are the considerations to be reconciled, and it is a capital field for an officer's study and the exercise of his ingenuity, as well as a point for observation in the inspection of men-of-war, as they are met with, belonging to various nations.

other obstruction placed expressly to receive the "thrust." Accordingly, every screw shaft has what is called a "thrust bearing," which is a collar arrangement on the shaft, crowding horizontally forward or back against a heavy timber framed into the ship. This also is easiest understood by inspection, and the aid of such oral explanation as may generally be obtained. The thrust bearing is away aft in the shaft alley, near the stern.

But the most important feature in connection with the screw shaft, that which has been found most difficult to perfect, and until perfected was the great want standing in the way of success to the screw as a certain and safe means of propulsion in heavy ships, is the stern bearing for the screw shaft, in the orifice through which it protrudes to couple with the screw. Whilst this was an ordinary metal bearing, it could never be made to stand, because of the enormous weight of the screw and shaft resting on it, the great rapidity of the revolutions, and its inaccessibility for lubrication. In some instances on board heavy ships, the bearings have worn away and settled, not only to produce obstruction, but to admit water, so as to endanger ships, and make it necessary to beach them to prevent foundering. An effectual remedy has been found, strange as it may appear, in wooden, *lignum vitæ* bearings, or metal cases lined with that wood. This, and a small flow of water in channels left between the wooden lining pieces, to keep down the heat arising from friction, now answers the purpose, as nothing else does; and almost every case of an attempt to dispense with this wooden appliance, has resulted in at least an impaired efficiency.*

The first screw brought into use at sea was Ericsson's, and the "Princeton" its first grand exemplification. Her performances were very creditable and successful, she having proved herself a most efficient man-of-war, especially by her promptness as a blockading ship at Vera Cruz. The British Admiralty tried it in the "Amphion," and the French marine in the "Pomone" frigate. For some reason, none of these experiments were repeated; Ericsson's screw went out of use at sea, and another one has taken its place—the inventor being an English farmer, Mr. F. P. Smith.†

Ericsson's screw *hung* by the shaft, and the enormous weight was sustained solely by the rigidity of the shaft, which needed to be correspondingly strong. When Fulton first applied side wheels to river boats, his wheel was hung in the same manner, by the shaft, with no outer or guard support. His greatest and long-continued difficulty, arose from inability to hang the wheel in this way securely. A workman is said to have suggested the guard support. Fulton's genius seized and adopted the suggestion, and success was immediate. Fulton's error, therefore, was Ericsson's. The distinctive characteristics, then, of Smith's screw, as compared with Ericsson's is, that the former has an outer support, or is at least steadied by an outer spring bearing, on the outer or after stern post to which the rudder is hung. And in searching for the reasons why Smith has been successful whilst Ericsson was not, it is probably to be found in the fact of this outer support. The only heavy screw ship now performing service at sea without an outer bearing, either as a main bear-

* When working hawsers from the stern of a screw ship, be ever vigilant against their fouling the screw.

† See an able article on screw propulsion in the *Atlantic Monthly*, from the pen of Commander Walker, U. S. N.

ing for support, or a spring bearing to steady the screw, is the "San Jacinto"—and she has never been a reliable vessel *with her screw* on foreign service—although *with her battery*, gallantly commanded in China, she has performed most excellent and effective service.*

When the outer stern bearing is a main bearing, the outer stern post to which the rudder is hung needs to be strong and large, which renders it a heavy drag, retarding in its effects, and causing considerable loss of power. But when the outer bearing is only a spring bearing to steady the shaft, the outer stern post needs less strength, is a less drag, may be and often is of metal, and thus occasions a very diminished or inconsiderable loss of power or speed.

In passage vessels or mail packets, in which steam is the principal power, sails merely auxiliary; which never uncouple to run under sail alone, and can afford neither the loss of power nor of speed produced by the heavy stern post; the outer bearing is invariably a spring bearing to steady the shaft, and the post is of metal, producing very small resistance or drag. And when for reasons extraordinary, such as accident to the machinery, it becomes necessary for these mail packets to uncouple, so that the screw may revolve freely, the uncoupling gear is found forward of the "collar bearing" provided to receive "the thrust," (article 28;) by which the outer bearing still remains only a spring bearing, and the support of the screw continues to depend in part on the rigidity of the shaft, (article 31.)

But a man-of-war, on foreign service, relies on sails principally, carrying steam as an auxiliary, and must cruise a large portion of the time wholly or in part under sail, using steam only in emergencies, which may or may not be frequent. Her screw bearings are accordingly adapted to this peculiar necessity. Thus far, this adaptation seems to require, that the outer bearing should be, equally with the inner one, a main bearing; the outer or rudder post consequently a heavy one; and the drag and loss it occasions be submitted to as an unavoidable necessity, and when both stern post bearings are main bearings, the "screw axle" is made no part of the shaft, but rests with its two axle arms, one in each stern post, and may revolve independently of the shaft, or any part of the shaft, as it does when disconnected or uncoupled.

For a screw thus capable of a revolution on its axle independently of the shaft, the coupling arrangement is effected by protruding an arm, (from within the after end of the shaft as from a sleeve,) which enters the screw axle, that being a hollow cylinder fitted to receive the protruding arm, and in a manner, by means of a slot, to cause the screw to revolve when the shaft is turned by the engine. Such is the plan in use on board the English ships first equipped with Mr. Smith's screw, and adapted to the peculiar requirements of military service, as cruisers abroad.

A more recent improvement, universally applied to ships-of-war lately constructed, is "the well," in which, when under sail alone, the screw is hoisted entirely out of water, in lieu of coupling by means of the arm protruding from the shaft as a sleeve, described in article 36; and the screw axle is solid instead of hollow. The details of the mode in which the screw is thus alternately hoisted and lowered again into coupling

* Allusion is here made to an unacknowledged and unrequited service, performed chiefly by commanders Foote and Bell, U. S. N., in capturing and destroying the "Barrier Forts," China, in 1856, and by it preparing the way for a most successful diplomacy.

By great care, and unusual skill, the ship was got through her China cruise; but her antecedents had not been, nor is her subsequent history, calculated to engender confidence.

with the shaft, so as to revolve with it, are best learned from observation, inspection, and inquiry. It is a most ingenious arrangement, due, it is said, to a French officer, and obviates a difficulty, viz.:—That although when, with high speed of the ship under sail, an uncoupled screw left in the water free for revolution, will so revolve and produce very little retardation, with a speed of only 4 or 5 knots the screw does not turn but is wholly a drag. So when with high velocity it does turn, the jar, noise, and wear produced, are worth obviating, and are obviated by lifting the screw out of water.

Another reason of governing force, yet not always considered, why the outer stern post for the bearing of a screw axle which may revolve independently of the shaft or any portion of the shaft, must be heavy and strong, when the stern post for a screw which is fixed to the shaft need not be, is, that if the former screw is turned back strong by the engine, the entire backward thrust results on the stern post, which, if light, would give way; whereas in the latter case, the uncoupling being effected forward of the thrust bearing, article 34, so that the after part of the shaft revolves with the screw, a "collar thrust" bearing on the shaft is so contrived (article 28,) that it receives the backward as well as the forward thrust, and entirely relieves the stern post from that necessity for strength.

The elements of efficiency in a screw, to be considered in comparing one with another, relate to revolutions, to pitch, to diameter, and to the number, shape, and surface of the blades.

With side wheels, the revolutions being alike, speed of vessel is as the diameter of wheel. With screws, revolutions being alike, speed is as the pitch of the screw, and has no relation to diameter, except that it gives surface; and if the diameter be less than is adapted to a vessel of 13 feet draft, the screw has not sufficient submersion to give it a proper hold in the water, and prevent an inordinate "slip"—slip being, in case of a screw, the difference between speed per log, and that due to pitch multiplied by revolutions. It varies from 10 per cent under the most favorable circumstances in smooth water, to 20 ordinarily; and when a vessel can only stem a gale, the slip is 100 per cent.

By "pitch" is understood, such an inclination of the blades to the water, as will, in an entire revolution (the slip not considered) give any certain progress to a vessel—screw her ahead, and is reckoned in feet. Thus the Princeton's screw had a pitch, the highest recorded, of 35 feet. With a turn, then, slip not considered, her progression should have been 35 feet; with 20 per cent off for usual slip, 28 feet. Her revolutions were 36 per minute. Therefore, $28 \times 36 \times 60 = 60,480$ feet per hour, or less than 10 knots (there are 6,086 $\frac{1}{3}$ feet in a sea mile) per hour, should have been her speed. *At sea* in rough water, she never, however, did hardly 9 knots, which shows the slip there to have been greater. In all cases, it increases with the resistance of wind and sea, until, as remarked in the preceding article, when a vessel can barely stem the weather, the slip becomes 100 per cent, like when fast to a wharf.

The usual pitch is 18 or 20 feet. Sometimes it is uniform—a "true screw;" at others, the pitch is increasing towards the extremity of the blade; which increase of pitch is with the same object as the "wave bow" (concave bow water line) of a ship, viz., more quickly to follow up the receding water. "Bourne," page 107, says, "the uniform pitch is as good as any," and "that no advantage has been found to result from an increas-

ing pitch." He further recommends, "as large a diameter as possible, a quick turn, and a fine pitch."*

A steeper pitch is best for carrying sail, because a fine pitch increases the revolutions more under high velocities from winds and sails, and is most likely to occasion drag of the screw. Drag is easily detected, by multiplying pitch into revolutions per minute, and again by 60, then dividing the product by 6,086, (the feet in a sea mile or "knot.") If this quotient is less than the speed per log, the drag is sure.†

As regards the number of blades, Bourne says, "a screw of two arms, or a portion of a double threaded screw, has been found as effectual a propeller as any other; but a screw of three blades, or a portion of a three threaded screw, has been found to act with a more equable and regular motion." In light draft vessels it is most important to have three, because in pitching, two blades may both be out of water at the same time, causing the engine to act with no resistance, and with dangerous rapidity. Three blades are, however, incompatible with the "well."

The area of screw surface is as the number, width, and length of the blades. And as the slip of a wheel decreases with the increase of the bucket, float, or paddle board surface, so ought slip to decrease with the increase in area of the screw—the screw being supposed constantly submerged.

Bourne says, "the length of screw that is found most beneficial, is about one-sixth of a convolution;" by which he is supposed to mean, that the screw surface should be that produced by such width of blade—the width increasing, from the hub out, with the length of blade; which increase of width also preserves the relation of one-sixth at all points with the "convolution."

But the best shape of blade is undetermined, for some are seen broadest in the middle, (as Griffith's for easier "clearance,") others near the screw center, others again enlarge uniformly to the extremities.

Sir Howard Douglas in his "Naval Warfare with Steam," page 61, proposes, with a view to reduce the "shake," to curve the leading edge of a blade, so that it shall not enter or leave the water all at once, but gradually; and moreover, that these leading edges should, for men-of-war, be made sharp, to cut or saw obstructions threatening to choke or impede the screw. In battle, the screws of those vessels are peculiarly exposed to disability, by spars, shot away and floating about, and the rigging hanging beneath the surface from them. Sir Howard's plan of

* To a seaman's eye, the blade of a screw appears to have constantly a decreasing pitch towards the extremities of the blades, when in reality, and to a mechanic's eye, the pitch is not decreasing, but uniform.

A screw, in scientific mechanics, is but a form of inclined plane. Erect a perpendicular equal to half the pitch of a screw in feet; establish points on the base, at distances from the perpendicular successively equal to twice the distances of any assumed points on the blades from the center of the screw axle; draw hypothenuses successively to the several points so established on the base; and these hypothenuses, by their decreasing angle at the base, whilst the perpendicular or half pitch which it represents remains constant, will indicate the decreasing inclination of the blades to the water towards their extremities; in other words, that which appears in the screw, is a decreasing angle of inclination, but not a decreasing pitch.

† A screw, known as Griffith's, has been used, one characteristic of which is, that the pitch is adjustable, and can be increased—rendered steeper, which avoids an increase of revolutions when under canvas with good winds. But considering the immense force—a pair of engines, acting on only two arms of one propeller, it must be doubtful if they do not need the strength which belongs to permanence.

Side wheel engines divide their force between the two wheels, and again amongst several floats of each wheel; and because they admit of feathering, (article 19, p. 103.) it by no means follows that screw blades will.

a curved blade edge, has great apparent merit, and is said to have accomplished the very important purposes intended.*

Sir Howard justly remarks, (*ibid*, page 72,) that the steering of a screw ship-of-war, particularly when maneuvering under steam alone, "should be as if instinct with life, intuitive, quick as volition!"

These screw vessels do steer better, quicker, and turn in much less space under steam, than side wheel ships; and for the reason, that the currents thrown by slip of the screw against the rudder, counteract the dead water which proverbially impairs its efficient action; whereas the side wheel, by its slip, produces currents which give an apparently increasing speed of vessel through the water, and cause at the stern a corresponding actual increase of dead water. Hence side wheel steamers require, and are found to have most rudder, in proportion to tonnage, length, and displacement.

When a ship is under sail alone, or with a tow, and the screw is coupled but drags, or is uncoupled, and the rate of sailing so slow as not to revolve it, especially if there are but two blades and they set in the vertical position, the inclination of the lower blade will act on the steerage like a rudder with its helm over to one side, because the upper blade, although inclining equally the other way, does not produce entire neutralization, but it has to be produced by an opposite action given to a rudder with the helm; and even that may prove insufficient. Hence a ship under these circumstances, will turn quicker, and in a shorter space, the way in which the lower blade and the rudder act in conjunction.

Again, when the ship is moving by the screw under steam, she will be found to turn to port in obedience to a starboard helm, more readily and in less space than she will turn to starboard in obedience to a port helm; and to keep a course by compass, it may be found necessary to carry a small port helm; the supposition being, that, looking forward, the screw turns *with* the sun, (from left to right,) as it usually does, and naturally should in screwing a ship ahead, otherwise it would be a left-handed screw. This effect upon steerage is caused by action of the lower blade revolving against a greater resistance than the upper blade meets moving in an opposite direction; and these opposite effects differ most in light draft vessels, where the upper blade is not always constantly and entirely submerged.

From ignorance or disregard of this peculiarity in screw ships, most disastrous collisions† have occurred. In time, however, seamen will be-

* Instead of wasting power by crowding the screw through a narrow space between stern posts set near to make a narrow well, which is a greatest cause of "shake," we save the power and in a measure avoid the shake, by a wider space and larger well than others use. We avoid also a sacrifice of screw surface where it is most effective, viz., at the extremities of the blades, whilst Griffith's blade obtains clearance (article 45) by this sacrifice. These considerations are thrown out to engage the attention of seamen, and direct their observation; for the seamen and the engineer are very necessary coadjutors. On *fouling*, see pp. 6 and 108.

† Though not relating to the present discussion, it is well to say, that for the purpose of preventing collisions at night, an order from the Navy Department requires government vessels, when under steam, to carry three lights—a white light at the foremast head, a green light on the starboard side, and a red light on the port side. These colored lights are screened and mutually seen only by vessels meeting. A vessel therefore seeing, for example, a stranger's red light only, in the direction its own red light shines, knows that the stranger and itself are on nearly opposite courses, with no danger of collision; that if it meets a green light only, in the direction its own red light shines, the stranger and itself are on courses angling to each other, and if his bearing does not change there is danger of collision, otherwise not; and if both colored lights of the stranger are seen right ahead, both vessels should immediately change their course so as mutually to exhibit the red light only, by which each passes on the other's port hand. Generally, when vessels see from each other one colored light only, and that of the same color, they are safe. Where there is doubt about the bearings in case opposite colors are those mutually visible, the safest solution is for each at once to

come familiar with it, and learn instinctively to make the necessary allowance.*

The foregoing pages contain all, it is believed, both of construction and practice, important to be known by any one not perfecting himself as a professed engineer; enough for the special necessities of the seamen; enough also for the general reader, deriving daily advantage from steam, yet exposed in a corresponding degree to its dangers. The popular mind is blissfully ignorant of steam, except as instructed by the chapter of horrors periodically revealed. Yet there is no folly in obtaining from more harmless sources, that degree of wisdom which will constitute the public a judge and a check over engineers, at sea and ashore, as it now habitually is over the other professions; a corrective greatly needed by the times, and one infinitely more effectual than legislation!

Art. III.—GENERAL AVERAGE.

At a meeting of the Boston Board of Trade, held December 3, 1860, the following interesting paper was read by J. Russell Bradford, Esq., on the subject of International General Average:—

To the President and Members of the Board of Trade:—

GENTLEMEN:—In obedience to your request, I attended the recent meeting of the "National Association for the Promotion of Social Science," held in the city of Glasgow on the twenty-fourth of September last, and had the honor of appearing as your representative to participate in the discussion as to an International System of General Average. The desirableness and importance of a uniform or international system or code, to be the basis of settlement, and to be followed in the adjustment of all General Average losses and sacrifices, has long been felt as a necessity by merchants and underwriters throughout the mercantile world; yet never, so far as my knowledge extends, has there been any attempt to inaugurate such a system until within a year, when certain gentlemen in Liverpool, interested in the subject, brought it to the notice of influential gentlemen in London, and by them it was presented to the proper officers of the "National Association for the Promotion of Social Science," with the request that suitable measures might be taken to have the question fully

exhibit its red light only, which is in all cases equivalent to "keeping to the right as the law directs;" or if that involves an inconvenience, the next safest plan is to mutually exhibit the green light only. To make all this clear and familiar, sketch and study diagrams of all conceivable relative positions. There is, amongst governments, a conventional understanding on the subject.

So, to avoid collisions a system of bells is established, by regulation or custom, for communicating speedily from the deck to the engine room of a marine steamer.

The navy regulation is:—Ahead slow, 1 bell; fast, 4; slow again, 1; slower, 1; stop, 2; back, 3. The custom generally prevailing in the merchant marine is:—Ahead slow, 1; fast, 8; slow again, 1; stop, 1; back, 2. Either is good. But if one is best, it ought to prevail; for uniformity is the surest guard against mistakes. The first is most complex, but least ambiguous.

* It is said that in calm smooth weather, by alternately throwing a current from the screw against a starboard helm, then reversing the screw to stop headway, a ship can be turned to head in an opposite direction without moving more than her length. So at anchor, by throwing a current against a starboard helm, more properly against a rudder in the position which a starboard helm gives it, the direction of a broadside is in some measure under control of the helm, and so far obviates the necessity of a spring on the cable. Try it.

A screw does not back so effectually as a side wheel, because the water thrown forward has no free escape, but strikes the ship and reacts upon the screw.

discussed at an early day. Under the direction of the Secretary of this Society, a synopsis of the laws and customs of different countries, relating to General Average—so far as known to him—was prepared, and sent to all, or nearly all, the commercial bodies in the world, asking of them a statement of the custom of the port where such bodies were located; and also requesting the appointment of delegates to attend the meeting of the Association at Glasgow, to the intent that there might be a full and free discussion of this most important subject by practical men, acquainted with its details and difficulties, and therefore able to suggest such changes in present customs as might be desirable. In reply to these requests there were received by the Secretary very full statements of the laws or prevailing rules of nearly every important commercial port in the world, thus gathering together a large mass of valuable and reliable information for future uses. It was an evidence of the widely extended interest in the subject thus brought under discussion, and was very gratifying to all present at the congress, that so many countries were represented; there being present delegates from the Netherland Trading Company and Shipowners' Committee of Amsterdam; Chamber of Commerce of Antwerp; Board of Trade of Boston, U. S.; Chamber of Commerce of Bremen; Board of Commerce of Cadiz; Chamber of Commerce and Underwriters' Association of Copenhagen; Chamber of Commerce of Hamburg; Commercial Association of Lisbon; Chamber of Commerce of Mobile; Board of Underwriters of New Orleans; Chamber of Commerce and Board of Underwriters of New York, &c., &c.

Besides the above mentioned the following commercial bodies of the United Kingdom appointed representatives: Shipowners' Association of Dundee; Chamber of Commerce of Edinburgh; Chamber of Commerce of Greenock, &c., &c. Several of the principal average staters of London, Liverpool, Glasgow, Amsterdam, &c., &c., also took part in the proceedings.

On the first day of the session Lord Brougham presided, and on subsequent days Lord Neaves. The Secretary stated briefly the objects of the meeting, and then certain papers, six in number, prepared by different gentlemen, stating the rules at present in vogue for the adjustment and settlement of general average losses, or proposing such changes in present customs as seemed to them desirable, were read. Following these readings, as no written communication had been received from the United States, the delegates from this country addressed the meeting by request, expressing their views. I have liberty to read two of these papers at this time: one from a gentleman of almost world-wide reputation among underwriters—the leading mind for a long series of years in the settlement of all marine losses at Lloyd's in London. I allude to the late William Richards, Esq. He took an active part in all our deliberations, by his fairness and gentlemanly courtesy winning the good will of all, and at the close of the Congress returned to London—there to continue but four days, when he was called from the scenes of earth. The record of his forty years of active life, as an adjuster of marine losses, is, as I am informed, one of such fairness, probity, honesty, and impartiality, as is rarely met with. The other is from the pen of L. R. Bailey, Esq., of Liverpool, a gentleman at the head of his profession, who has edited several books upon the subject of marine losses, and whose practical knowledge of it is second to none.

After the addresses from the delegates from this country, the first resolution was offered in these words: "Resolved, that the losses or damage to a vessel or her cargo by voluntary stranding should *not* be a subject of General Average." This is in accordance with universal practice in Great Britain, and the representative from Lloyd's, together with all who took part in the discussion from any port in Great Britain, excepting one gentleman from Liverpool, supported the theory that in no case should the voluntary stranding of a vessel give rise to contribution in General Average. The remaining portion of the day was devoted to this question; some of the reasons given for the resolution being: that it was according to universal custom in England, and wherever English law prevailed; that in case of the running of a vessel on shore, there is no selection of any *particular* property to be destroyed for the benefit of the remainder; that in such a case no man could tell what damage was sustained before, and what at the time the vessel struck the shore, that in such a case the vessel was practically lost before the alleged act, and the question was merely whether the vessel should sink in deep water or in shallow; that it was the master's duty to run a sinking vessel on shore, and it was done not to save property, but to save life; that all damage to cargo in such a case must be considered as partial loss or particular average, having been caused by perils of the sea, as it was by the leaking of the vessel; that the establishment of a rule contrary to the resolution, would open a wide door for fraud, and the result would be that very many captains and owners of vessels would seek to bring the loss of their shipwrecked vessels under the rule, were it established, or even recommended, &c., &c. Notwithstanding all these arguments and others, the resolution was negatived by a vote of 19 to 15. If only the delegates had voted the majority would have been much larger, but several adjusters of marine losses, and others, having more or less knowledge of English custom, cast their votes on this resolution. On the last day of the session, this resolution was again brought forward, in the hope that something might be done with greater unanimity, and after a long discussion the following was passed unanimously. Resolved,

RULE 1.—That, as a general rule, in the case of the stranding of a vessel in the course of her voyage, the loss or damage to the ship, cargo or freight, ought not to be the subject of general average, but without prejudice to such a claim in exceptionable cases upon clear proof of special facts.

After a lengthy debate, extending through two whole days, ten other resolutions were passed, as follows:—

RULE 2.—That the damage done to ship, cargo or freight, in extinguishing a fire, ought to be allowed in general average—20 to 4.

RULE 3.—That the damage done to cargo by chafing and breaking, resulting from a jettison of part of the remainder of the cargo, ought not to be allowed in general average—14 to 10.

RULE 4.—That the damage done to cargo, and the loss of it and the freight on it, resulting from discharging it at a port of refuge in the way usual in that port with ships not in distress, ought not to be allowed in general average—12 for, 6 against.

RULE 5.—That the loss sustained by cutting away the wreck of masts accidentally broken, ought not to be allowed in general average—20 for, 2 against.

RULE 6.—That the expense of warehouse rent at a port of refuge on cargo necessarily discharged there, the expense of reshipping it, and the outward port charges at that port, ought to be allowed in general average—19 for, 4 against.

RULE 7.—That the damage done to ship, cargo and freight, by carrying a press of sail, ought not to be allowed in general average—Unanimously.

RULE 8.—That wares and provisions for the ship's crew ought to be allowed to the shipowner in general average, from the date the ship reaches a port of refuge in distress until the date on which she leaves—15 for, 10 against.

RULE 9.—That when the amount of expenses is less than the value of the property finally saved, the contributing values of ship, freight and cargo, ought to be their values to the owners of them respectively, at the termination of the adventure—11 for, 1 against.

RULE 10.—That when the amount of expenses is greater than the value of the property saved, the proceeds of the property so saved ought to be applied towards those expenses, and the excess of the expenses over the proceeds ought to be apportioned as if the whole property had finally reached its destination—12 for, 2 against.

RULE 11.—That, in fixing the value of freight, the wages and port charges up to the date of the General Average Act ought not to be deducted; and the wages and port charges after that date ought to be deducted from the gross freight, at the risk of the shipowner—7 for, 3 against.

Some discussion followed as to the best method of procedure in order to carry out the views expressed, which resulted in the unanimous resolve:—

1. That the meeting hereby requests the Council of the Association to assist by their counsels such person or persons as may be approved of by them, in drawing up a bill, with a view to its being enacted into a law by the legislative authorities of the several nations of the world, which bill shall define, as clearly as may be, the term "General Average," and describe more or less fully the cases intended to be included within the definition, and which shall also specify the nature of the loss, damage, or expense allowable in General Average, and the principle on which the amount of the loss, damage, or expense shall be ascertained; also furnish a rule or rules for ascertaining the contributory values of the interests concerned, and which shall also contain such matters as the person or persons drawing up the bill may think it advisable to insert. That upon such bill being drawing up and printed, copies thereof shall be transmitted to the several Chambers of Commerce, Boards of Underwriters, Ship-owners' Associations, and other commercial societies in different parts of the world, accompanied by a copy of this resolution, and a request to them to examine and return said copies, with such alterations or amendments as they may think proper to make therein, within six months from the time of the receipt thereof. That, upon the return of the said copies, or upon the expiration of the said six months, the said bill shall be revised by the person or persons drawing up the same, enlightened by the information acquired as aforesaid. That, upon the bill being perfected in the manner aforesaid, it be recommended to the legislative authorities of all commercial nations to enact the same into a law.

2. That, in the meantime, the meeting resolves to circulate as widely as possible, for general information, the rules embodied in the resolutions which have been passed by the meeting, as those which, under a uniform system, it might be desirable to consider.

It may now be asked whether there is any possibility of attaining this uniformity of system, so much desired in all cases of General Average loss. Of this, probably others here present can judge quite as well as I can; but it is certainly something gained that there has been a desire, thus publicly expressed, for such a system; and something more to know that so many commercial bodies from different parts of the world, deemed it of sufficient consequence to send delegates to this Congress, for every one of these, with the exception of the gentlemen from Mobile and Boston, left their homes and business for the sole purpose of expressing the universal desire of their several mercantile communities for an International Law, or set of rules upon the subject, and to do what they could to promote it. It is also very encouraging to find that the body known as Lloyd's, as well as prominent merchants and underwriters, acknowledge the desirableness of some uniform practice, and also admit that their own practice should in some respects be changed. It may be remarked here, that the principal difficulty in the way of an international system is in the very vague and little understood "Custom at Lloyd's." Nearly all continental laws upon this subject of general average, as well as the laws of the United States, are substantially in conformity with the old Rhodian law, and wherever the "Custom at Lloyd's" is contrary to that, such custom is not only an innovation, but is in most cases, if not in all, contrary to what is in this country considered sound principle.

That a set of rules or code, embracing this whole subject, will be prepared as soon as may be, and that such rules or code will be forwarded to this Board of Trade, and to other commercial bodies throughout the world, is deemed certain, as the Secretary of the National Association has already, some time since, placed the matter in the hands of gentlemen learned in the law, and acquainted with the subject in its practical details, for the purpose of carrying out the 12th resolution. By these gentlemen, it is fair to presume that some inconsistencies now noticeable in the rules passed, will be removed, and that a system will be presented, which when it shall have been examined and commented upon by Boards of Trade, Chambers of Commerce, and Underwriters' Associations, and is, after such comments, remodeled carefully by those having it in charge, will commend itself to the mercantile world, and become custom, and in time law. As an evidence of the interest manifested at Lloyd's upon this whole subject, I will read a letter received during the past week. In handing you this, my report of the doings at the Congress in Glasgow, I beg leave to express my appreciation of the honor conferred by an appointment as delegate from the Board of Trade of Boston.

JOURNAL OF MERCANTILE LAW.

STOP LAW IN TENNESSEE.

The following is a copy of the bill prescribing the remedy for the collection of debts and relief for the people, as it finally passed through the Legislature, and is now a law :—

SECTION 1. Be it enacted by the General Assembly of the State of Tennessee, That from and after the passage of this act, all judgments and decrees which shall be rendered in any of the courts of record in this State, or which shall be rendered by justices of the peace of this State for money, shall be stayed by such courts and justices for the period of twelve months from the rendition of such decree or judgment : *Provided*, That the defendant or defendants in said judgments or decrees shall appear before said courts of record during the term of such court, or within two days after the rendition of the judgment before justices of the peace, and give good and ample security for the stay of execution, to be approved of by said courts or justices, which stay shall operate as a judgment against the security in said courts or before said justices.

SEC. 2. Be it further enacted, That upon affidavit of the plaintiff in the judgment, his agent or attorney, made before the court or justice of the peace, or before the clerk of said court if in vacation, showing that the security for the stay of execution is not good and sufficient, the defendant, upon five days' notice being given, shall justify the security already given, or give other security to be approved of by the justice of the peace, or by the court if in session, and if in vacation by the clerk of said court, and upon his failure to justify or give other security, execution shall issue immediately. If the additional security shall be taken by a justice of the peace, it shall be sufficient to bind the security if he write his name as additional security or stayor upon the justice's docket, or shall authorize the same to be done by the justice, either verbally or in writing. If said additional security shall be taken by the court, the same shall be entered as matter of record on the minutes of said court. If said additional security shall be taken by the clerk in vacation, it shall be sufficient in order to bind the security that he acknowledge himself additional security or stayor, on the execution docket in said clerk's office.

SEC. 3. Be it further enacted, That in all cases where judgments or decrees have been rendered by any of the courts or justices of the peace in this State, upon which executions have been issued and not levied, the defendant or defendants in said judgment or execution may appear before the justice of the peace, or court, if in session, or before the clerk of said court in vacation, and upon giving good and ample security to said justice, court, or clerk, as the case may be, in the manner provided in the second section of this act for giving additional security, said execution shall be stayed six months from the time said security shall be given, when execution may issue against the parties to the original judgment and the security for the stay of the execution. And that in all cases where any execution or order of sale may be levied on personal property, that the debtor in the process shall have the option to avail himself of the preceding provisions of this act, or it shall be lawful for him to give bond in double the value of the property, and good security to the officer for the forthcoming of said property for sale at the court house of the county, or such other places as the parties may agree upon, in which the levy is made, on the first Monday of December, 1861. And if in the interval the surety or sureties become insolvent, the levying officer may notify the defendant, and he shall give sufficient additional security for the delivery of said property at said time and place. In order to constitute the levy on real estate valid as to proceedings before a justice of the peace, the execution shall be registered in the register's office of the county where the land lies.

SEC. 4. Be it further enacted, That in case additional security shall be given as provided in the second section of this act, the first security given shall not hereby be released from liability, but execution shall issue against the original parties to the judgment, and against the first as well as additional securities.

SEC. 5. Be it further enacted, That this act shall not be so construed so as to authorize the stay of execution upon judgments before justices of the peace that were not subject to stay before the passage of this act. Nor shall executions on judgments rendered in court against officers and their securities for official default, nor judgments in favor of a security, accommodation indorser, stayor, or co-security, who has been compelled to pay money for his principal or co-security, be stayed under the provisions of this act.

SEC. 6. Be it further enacted, That upon application of the stayor or security for the delivery of property, as provided for by this act, by affidavit in writing, to be filed with the papers, that he is fearful and believes, and has good reason to believe, that if execution is stayed, he will be compelled to pay the judgment, an execution shall issue against the debtor and stayor at any time; or if the security for the delivery of the property shall make such affidavit, the principal in said delivery bond, upon ten days' notice, shall deliver the property mentioned in said bond, at the place designated therein, and the officer shall proceed to expose the same to public sale to pay said debt: *Provided*, The parties to the original judgment may give new, good, and sufficient security, as now provided by law.

SEC. 7. Be it further enacted, That delivery bonds given under the provisions of this act, shall have the same effect and be governed in all respects by the laws now in force in reference to delivery bonds, except so far as the same may conflict with this act.

SEC. 8. Be it further enacted, That if any party, upon being notified to give additional security, and shall fail to do so, then the officer shall proceed and sell the property levied upon as though no delivery bond had been given.

SEC. 9. Be it further enacted, That this act shall not apply to actions or judgments against executors, administrators, or other persons acting in a fiduciary capacity, for money due by them to distributees, legatees, or others, and which has been actually collected by them.

SEC. 10. This act shall expire by its own limitation on the first day of July, 1862.

Passed, January 26, 1861.

INNOCENT HOLDER.

In the United States Supreme Court.—Pennsylvania. Before Judge STRONG.
Hawkins vs. Cree.

STRONG, J.—The rule laid by Lord MANSFIELD in *Walton vs. Shelly* was an attempt to introduce a new exception to the principle that infamy and interest are the tests of a witness' incompetency. The attempt proved a failure. The new rule was short lived in the country of its birth, and *Jordaine vs. Lashbrook* (7 term Rep., 601) denied it altogether. But though early repudiated in England, it was adopted here, and it still exists as a rule of our law, though judges have said that it is not to be extended, and though the later decisions have very much restricted its operation. As it exists now with us, it extends only to negotiable paper, actually negotiated before maturity in the usual course of business, and in the hands of an innocent holder, who took it without any previous notice of any original defect in it, and it excludes only those parties whose names were on the paper when it was transferred to the holder. Thus it was stated in *Wilt vs. Snyder* (5 Har., 77,) and substantially in *Harding vs. Mott* (8 Har., 469.)

Was, then, the note upon which this suit was brought negotiated in the usual course of business, and was the plaintiff an innocent holder, without any previous notice of any original defect in it?

The note was assigned to the plaintiff not indorsed, and the assignment was

not accompanied with a general guaranty made by the assignor and a third party. We are not prepared to affirm that this was a negotiation in the usual course of business. It was not the mode in which promissory notes and bills of exchange are commonly transferred. When payable to order, they usually pass by indorsement and without any superadded guaranty. There is a clear distinction between a transfer by indorsement and one by assignment. The statute of ANN recognizes, and indeed, makes a distinction. (*Lyons vs. Divilbiss*, 10 Har., 185.) The holder of a promissory note, by either mode of transfer, may bring a suit in his own name, but he does not acquire the same rights against his assignor, which he has against his indorser. Over the name of the former he can write no order upon the maker in the nature of a bill of exchange. His assignor has assumed no other engagement to him than the restricted one that the note is genuine. It may be doubted, therefore, whether an assignment is a negotiation in the actual course of business, and more especially when it is coupled with a guaranty of a third party.

Waiving this, however, we think there was sufficient evidence in this case that the plaintiff was not an innocent holder without notice of any stain upon the note to justify the admission of the payee as a witness for the defendant. Before the testimony of the payee was offered, it had been proved by other witnesses that the plaintiff admitted on one occasion, when speaking of his having obtained the note, that he did not want to take it; that he thought there was something wrong with it, unless BARCLAY would guaranty it, and that BARCLAY would not do it for a long time, for fear it would cause hard feelings between him and the defendant.

On another occasion he said, "he was satisfied they were wronging CREE;" and again, he said, "they had a good deal of coaxing before they could get BARCLAY to guaranty it." To whatever period he may have referred, when he said he was wronging the defendant, it cannot be doubted that his admission of a conviction that there was something wrong with the note referred to his belief at the time when he took an assignment of it. It was because he thought so then that he demanded a guaranty, not a guaranty of solvency of the maker, but a general guaranty. And can one who has taken a transfer of a promissory note tainted by fraud in its inception be said to be an innocent holder, if, at the time of the transfer to him, he thought there was something wrong with it? If such were his convictions then, there must have been some basis for them, some knowledge of facts which awakened his misgivings. There was something which, in his mind, cast a shade over the original transaction that should have put him upon inquiry; and if he neglected it, and chose rather a collateral guaranty, he took the note with all its antecedent equities upon it. His case was not, therefore, within the rule of *Walton vs. Shelley*, as restricted in this State, and the deposition of LEVI CLARK was properly admitted.

The other assignments of error require but brief notice. The conversation between DEAN and CLARK, though not immediately in the presence of the defendant, was a part of the means made use of to accomplish it. The testimony, if believed, proved that they were conspirators; and what was said or done by either in carrying out their common design was admissible in evidence.

The offer of the plaintiff to show that DEAN got credit for the payment of another note due to HAWKINS in a settlement between himself, BARCLAY, and SHARPNECK, was wholly inadmissible. It did not tend to prove that the plaintiff had paid a valuable consideration for the note in suit; even if it did, it was of no importance. If the note in suit was obtained by fraud, and the plaintiff knew it, or ought to have known it, at the time when he became the holder, he cannot recover, even though he paid value for it; and on the other hand, if it was not obtained by fraud, or if the plaintiff was an innocent holder, without notice of the fraud, he was entitled to recover, without proof of value paid, in the absence of any notice to make such proof. So the case went to the jury, and it was left to them to find whether there was fraud, and whether the plaintiff had notice of it. Such was, in effect, the answer of the court to the defendant's first and fourth points, and we think it was entirely correct.

The judgment is affirmed.

COMMERCIAL CHRONICLE AND REVIEW.

POSITION OF COMMERCE—POLITICAL CLOUDS—MERCHANDISE ON THE MARKET—NEW TARIFF—ADVERSE INFLUENCE—STATE OF TRADE WEST AND SOUTH—STAGNATION OF BUSINESS—FAILURES IN JANUARY—1857 AND 1861—EXPORTS—EXCHANGE—FALL IN RATES—CHECK UPON EXPORTS—COTTON STATEMENT—SPINNERS—ACTIVITY OF MANUFACTURERS—BREADSTUFFS—RATES OF BILLS—SPECIE MOVEMENT—ASSAY—OFFICE—MINT—GOVERNMENT FINANCES—STATE INDORSEMENT—NEW LOAN—\$25,000,000 LOAN LAW—RATES OF MONEY—FOREIGN MARKETS—EXPORTS.

THE extraordinary condition of the national commerce, which we described in our last number, has preserved its main features, with some exaggeration, up to the close of the present month. The uncertainty in relation to the future prevented the usual preparation for business on the part of active business men, and those goods which continued to arrive, although diminished in extent by counter orders, were far in excess of the current market wants, and they accumulated in bond, as will be seen by reference to the tables hereto customarily annexed. The amount of general merchandise put upon the market was small, while the quantity under bond rose to figures quite as high as any that were reached during the panic of 1857. This is the more remarkable that the circumstances in respect of tariff are reduced. The tariff of 1857 provided for large reductions of duties after July 1st of that year, and it was natural that goods which arrived should go into bond to wait the action of that law, and thus come into consumption at a lower tax. At the present time, on the other hand, goods accumulate in bond, although there is before Congress a bill, with every prospect of becoming a law, which will largely increase the duties on most of the articles now dutiable, and bring those now free into the dutiable list. Notwithstanding this prospect, which, in ordinary times, would cause large entries of goods, the deliveries for consumption are very small. Neither the Southern nor the Western trade is such as to tempt the usual rivalry in making sales. There is, no doubt, under existing circumstances, less desire to make purchases, but the financial aspect is such as to make credit transactions extra hazardous. Many dealers prefer to have the goods in store to transferring them to the portfolio in the shape of notes that may have a less ultimate actual value. The general stagnation also greatly interferes with the collection of outstanding claims depended upon to meet the spring payments, and the resulting failures are large. One of the mercantile agencies of New York city reported the number of failures for each State in the month of January, as follows :—

NUMBER OF FAILURES IN THE UNITED STATES IN JANUARY, 1861.

Connecticut.....	8	New York State.....	63	Louisiana.....	8
Illinois.....	53	Ohio.....	62	Maryland.....	25
Indiana.....	36	Pennsylvania.....	65	Mississippi.....	10
Iowa.....	16	Vermont.....	3	Missouri.....	47
Kansas.....	4	Wisconsin.....	20	North Carolina.....	24
Massachusetts.....	75	Maine.....	5	South Carolina.....	8
Michigan.....	20	Rhode Island.....	3	Tennessee.....	18
Minnesota.....	1	Alabama.....	8	Texas.....	26
New Hampshire.....	12	Delaware.....	4	Virginia.....	33
New Jersey.....	20	District of Columbia..	7	Arkansas.....	5
Nebraska Territory..	2	Georgia.....	34		
New York city.....	97	Kentucky.....	39	Total.....	859

The number of failures Jan., 1860, was 455 ; in Jan., 1859, 640 ; in Jan., 1858, after the panic, 825 ; but the failures in January are usually less than during the months of March and April, when the heavy payments mature. The failures this year present the remarkable features of taking place at a moment when money is a "drug," when specie has accumulated with great rapidity in the bank vaults, and reached a point in New York city higher than ever before, at the same time the bank loans run down under the influence of payments on maturing paper and the non-creation of new paper. The failures of the mercantile public in 1857 arose from the inability to apply debts to credits—in other words, through the refusal of the banks to discount the bills receivable, to enable holders to meet bills payable. At present the banks are anxious to discount all good business paper ; but this has not been created by the operations of trade, and collections come in slowly. The smallness of the imports of goods presents a contrast to the continued large exports, as well of cotton as breadstuffs and provisions, and this circumstance has tended to lessen the demand for sterling bills to remit. The rate of which forced the importation of gold in December, and which rose under the action of the bank committee, continued with the improved tone of the general markets, has again declined under the excess of supply over demand, and point to renewed imports of specie. This circumstance, causing renewed difficulty in negotiating bills, checked the exports of produce, the more so that the cotton receipts improved, and indicated that the crop would reach at least 4,000,000 bales. The movement of the cotton crop has been as follows :—

	1860.	1861.
Stock, September..... bales	140,174	220,750
Receipts to February 13	3,158,135	2,562,856
Supply.....	3,298,809	2,788,606
Exports.....	1,851,757	1,758,967
Balance.....	1,446,552	1,024,639
Stock, February 13.....	1,091,878	617,860
United States consumption, Sept. 1, to Feb. 15.	355,174	407,279

The quantity exported is 100,000 bales short of last year ; the quantity taken by the Northern spinners is larger than last year, which was one of extraordinary purchases. The excess so taken during the first six months of the cotton year has reached 52,000 bales, while the export has diminished in double that amount. These figures disclose the fact that manufacturing industry, at least in that branch of it, has not been disturbed by those influences which have so disturbed trade. The supply of American goods may, no doubt, be reasonably expected to compensate in some degree for the diminished arrivals of foreign merchandise. If we turn to the exports of breadstuffs from the United States to Europe and Great Britain for a similar period, we have results as follows :—

	Flour, bbls.	Wheat, bush.	Corn, bush.
September to December 15.....	913,472	10,825,951	1,824,817
Month to January 15	203,119	1,566,561	872,863
Month to February 15.....	254,481	1,291,121	698,456
Total, September 1 to February 15.	1,371,078	13,683,633	2,396,136

These exports give a value of \$27,200,000, an excess of about \$25,000,000, or over \$1,000,000 per week, above last year, as a basis for bills. In face of this supply of bills the demand for them, as measured by the importation of goods, has much diminished. The rates of bills have been as follows :—

RATES OF BILLS IN NEW YORK.

	London.	Paris.	Amsterdam.	Frankfort.	Hamburg.	Berlin.
Jan. 1..	9 a 9 $\frac{1}{2}$	5.18 $\frac{1}{2}$ a 5.17 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 a 73 $\frac{1}{2}$
15..	8 $\frac{1}{2}$ a 9	5.21 $\frac{1}{2}$ a 5.18 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
Feb. 1..	8 $\frac{1}{2}$ a 9	5.18 $\frac{1}{2}$ a 5.17 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
15..	8 $\frac{1}{2}$ a 9	5.18 $\frac{1}{2}$ a 5.17 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
Mar. 1..	8 $\frac{1}{2}$ a 9	5.17 $\frac{1}{2}$ a 5.15	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
15..	8 $\frac{1}{2}$ a 8 $\frac{1}{2}$	5.17 $\frac{1}{2}$ a 5.16 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
Apr. 1..	8 $\frac{1}{2}$ a 8 $\frac{1}{2}$	5.18 $\frac{1}{2}$ a 5.16 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
15..	8 $\frac{1}{2}$ a 8 $\frac{1}{2}$	5.16 $\frac{1}{2}$ a 5.17 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
May 1..	9 $\frac{1}{2}$ a 9 $\frac{1}{2}$	5.13 $\frac{1}{2}$ a 5.12 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 42	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
15..	9 $\frac{1}{2}$ a 9 $\frac{1}{2}$	5.13 $\frac{1}{2}$ a 5.13 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 42	36 $\frac{1}{2}$ a 37	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
Jun. 1..	9 $\frac{1}{2}$ a 9 $\frac{1}{2}$	5.13 $\frac{1}{2}$ a 5.12 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 42	37 a 37 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
15..	9 $\frac{1}{2}$ a 9 $\frac{1}{2}$	5.13 $\frac{1}{2}$ a 5.12 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 42	36 $\frac{1}{2}$ a 37 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
July 1..	9 $\frac{1}{2}$ a 9 $\frac{1}{2}$	5.13 $\frac{1}{2}$ a 5.13 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 42	36 $\frac{1}{2}$ a 37	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
15..	9 $\frac{1}{2}$ a 9 $\frac{1}{2}$	5.13 $\frac{1}{2}$ a 5.13 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 37	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
Aug. 1..	9 $\frac{1}{2}$ a 9 $\frac{1}{2}$	5.13 $\frac{1}{2}$ a 5.13 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 42	36 $\frac{1}{2}$ a 37	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
15..	9 $\frac{1}{2}$ a 10	5.13 $\frac{1}{2}$ a 5.13 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 42	36 $\frac{1}{2}$ a 37 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
Sep. 1..	9 $\frac{1}{2}$ a 10	5.14 $\frac{1}{2}$ a 5.13 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 42	36 $\frac{1}{2}$ a 37	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
15..	9 $\frac{1}{2}$ a 9 $\frac{1}{2}$	5.14 $\frac{1}{2}$ a 5.13 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 42	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
Oct. 1..	9 $\frac{1}{2}$ a 9 $\frac{1}{2}$	5.15 $\frac{1}{2}$ a 5.14 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
15..	8 $\frac{1}{2}$ a 9	5.17 $\frac{1}{2}$ a 5.16 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	73 $\frac{1}{2}$ a 73 $\frac{1}{2}$
Nov. 1..	8 a 8 $\frac{1}{2}$	5.20 a 5.17 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	41 $\frac{1}{2}$ a 41 $\frac{1}{2}$	36 $\frac{1}{2}$ a 36 $\frac{1}{2}$	72 a 73
15..	5 a 6 $\frac{1}{2}$	5.30 a 5.28 $\frac{1}{2}$	40 $\frac{1}{2}$ a 40 $\frac{1}{2}$	40 $\frac{1}{2}$ a 41 $\frac{1}{2}$	35 $\frac{1}{2}$ a 36 $\frac{1}{2}$	72 $\frac{1}{2}$ a 72 $\frac{1}{2}$
Dec. 1..	1 a 5	5.47 $\frac{1}{2}$ a 5.40	39 $\frac{1}{2}$ a 40 $\frac{1}{2}$	40 a 40 $\frac{1}{2}$	34 $\frac{1}{2}$ a 35 $\frac{1}{2}$	69 $\frac{1}{2}$ a 76 $\frac{1}{2}$
15..	1 a 4	5.60 a 5.50	39 a 39 $\frac{1}{2}$	39 a 39 $\frac{1}{2}$	34 $\frac{1}{2}$ a 34 $\frac{1}{2}$	72 $\frac{1}{2}$ a 73 $\frac{1}{2}$
Jan. 1..	2 $\frac{1}{2}$ a 5	5.40 a 5.45	38 $\frac{1}{2}$ a 39 $\frac{1}{2}$	39 $\frac{1}{2}$ a 39 $\frac{1}{2}$	34 $\frac{1}{2}$ a 35	68 $\frac{1}{2}$ a 69 $\frac{1}{2}$
15..	5 $\frac{1}{2}$ a 6 $\frac{1}{2}$	5.30 a 5.33 $\frac{1}{2}$	40 a 40 $\frac{1}{2}$	40 $\frac{1}{2}$ a 40 $\frac{1}{2}$	35 $\frac{1}{2}$ a 35 $\frac{1}{2}$	70 $\frac{1}{2}$ a 70 $\frac{1}{2}$
Feb. 1..	5 a 6	5.37 $\frac{1}{2}$ a 5.35	40 a 40 $\frac{1}{2}$	40 $\frac{1}{2}$ a 40 $\frac{1}{2}$	35 $\frac{1}{2}$ a 36	70 $\frac{1}{2}$ a 70 $\frac{1}{2}$
15..	2 a 5 $\frac{1}{2}$	5.42 $\frac{1}{2}$ a 5.35	39 $\frac{1}{2}$ a 40 $\frac{1}{2}$	40 $\frac{1}{2}$ a 40 $\frac{1}{2}$	35 $\frac{1}{2}$ a 35 $\frac{1}{2}$	70 $\frac{1}{2}$ a 70 $\frac{1}{2}$

With such figures, so far below the actual par for sterling, the specie movement has presented an appearance very unusual during the past ten years, or since the discovery of California. The exports, apart from doubloons and silver sent to the West Indies, has become nominal, while receipts continue considerable, as follows :—

GOLD RECEIVED FROM CALIFORNIA AND EUROPE AND EXPORTED FROM NEW YORK WEEKLY, WITH THE AMOUNT OF SPECIE IN SUB TREASURY, AND THE TOTAL IN THE CITY.

	1860.		1861.		Total in the city.
	Received.	Exported.	Received.	Specie in sub-treasury.	
Jan. 5.....		\$85,080	1,482,857 1,338,100*	\$3,645,437	\$28,485,000
12.....	\$1,788,666	88,482	1,446,219 1,400,000*	2,584,455	29,045,300
19.....		269,400	1,693,052	2,166,242	31,764,706
26.....	1,780,582	81,800	1,246,029	5,751,298	34,720,200
Feb. 2.....	94,596	427,457	1,511,693 1,200,006*	289,669	35,382,000
9.....	1,476,621	92,350	800,000	3,644,921	38,300,500
16.....		592,997	1,616,111	3,356,000	40,475,000
Total.....	5,120,469	1,627,566	13,756,067	545,323	.....

* From Europe.

Thus, of \$13,750,000 received in the city since January 1st, more than \$12,000,000 has accumulated in the city without producing much influence upon general business. The operations of the New York assay-office for the month of January indicate, as compared with the same month of last year, the destination of the metals.

The deposits of foreign coin were large, and were ordered into American coin, an operation that takes from their exportable value. To avoid that, it was vainly proposed to Congress to restore the law making foreign coin a legal tender.

NEW YORK ASSAY-OFFICE—DEPOSITS.

	Foreign.				United States.				Payments	
	Gold. Coin.	Bullion.	Silver. Coin.	Bullion.	Gold. Coin.	Silver. Coin.	Bullion.	Bars.	in Coin.	
Jan. 4, 500,000	1,000,000	59,000	40,000	2,539,000	20,000	57,000	2,000	8,218,000		
'60	14,000	18,900	11,200	14,000	2,478,000	1,800	20,000	647,000	1,910,000	

The effect of this demand for coin also shows itself in the returns of the United States mint, which, for the month of January in the last three years, were as follows :—

UNITED STATES MINT, PHILADELPHIA.

	Deposits.		Coinage.			Total.
	Gold.	Silver.	Gold.	Silver.	Cents.	
January.....	\$8,209,669	\$156,413	\$8,052,321	\$91,100	\$5,000	\$8,148,421
" 1860.	200,000	41,000	1,024,563	41,000	24,000	1,090,568
" 1869.	148,040	51,675	59,821	56,000	85,000	150,825

The Philadelphia mint and that at San Francisco are absorbing the government business. That at Dahlonega will probably be discontinued.

The stock market has shown the effects of the abundance of money, mostly in the firmness of the large holders, but speculation has been held in check by political influences and the disastrous condition of the federal finances. At the date of our last the new Secretary of the Treasury had succeeded in placing \$5,000,000 of treasury notes at an average of 10½ interest. The credit of the government in the market is indicated in the fact that the 12-per cent treasury notes have fluctuated between 1½ and 2 per cent premium. Subsequent reports from the Secretary on the state of the treasury showed a deficit of \$8,000,000 up to March 4th, and with the prospect of large loans in the future. A bill authorizing a loan of \$25,000,000 was passed by Congress, but the difficulties that hang over the market made its negotiation a matter of doubt, and it was proposed to have recourse to the deposits made with the States in 1836, at the period the treasury was burdened with a surplus revenue that grew out of the large land speculations, land sales, and imports of merchandise. Congress ordered that \$37,468,859 88 should be deposited with the several States, *pro rata* of the representation, until called for. Some of the States refused their share, on the ground of unconstitutionality of the law. The payment was to be made in four instalments; of these three were made, when revulsion overtook the markets, the imports declined, and the land speculation subsided to a point that left a large deficit in the revenues. The fourth instalment was accordingly withheld. It has now been proposed for the several States to indorse the federal bonds to an amount equal to those deposits. The following is a statement of the shares of the several States in the surplus revenue deposited with them by the United States government, by the act of June 23, 1836, and which the pres-

ent Secretary proposed to make the basis of security for a new loan to provide for the expenses of the treasury of the government :—

Maine.....	\$955,838 25	Louisiana.....	477,919 14
New Hampshire.....	669,086 79	Mississippi.....	382,335 30
Vermont.....	669,086 ..	Tennessee.....	1,438,757 39
Massachusetts.....	1,338,173 58	Kentucky.....	1,438,757 39
Connecticut.....	764,670 60	Ohio.....	2,007,260 84
Rhode Island.....	382,335 30	Missouri.....	382,335 30
New Jersey.....	764,670 60	Indiana.....	860,254 44
New York.....	4,014,520 71	Illinois.....	477,919 14
Pennsylvania.....	2,867,514 78	Arkansas.....	286,751 49
Delaware.....	286,751 49	Michigan.....	286,751 49
Maryland.....	955,838 25		
Virginia.....	2,198,727 99	Total.....	\$28,101,644 91
North Carolina.....	1,438,757 39	Add 4th instalment which	
South Carolina.....	1,051,422 09	was not paid.....	\$9,367,214 97
Georgia.....	1,051,422 09		
Alabama.....	669,086 79	Total surplus.....	\$37,468,859 88

The payment of \$28,000,000 was made in three instalments ; the fourth instalment was to have been paid October 1, 1837, but was withdrawn on account of the financial difficulty in which the government then found itself.

Of the \$28,101,645 actually paid, the States which have now seceded, excepting Florida, not then admitted, received \$3,032,185 41. The free States which shared in the surplus received \$16,058,082 81.

We may here call to mind that when State credit broke down in 1840, and nine sovereign States failed to make good their engagements, it was proposed by the leading financial authorities of London, that the States should give a " more comprehensive guarantee " for their credit in the shape of federal indorsement of State bonds. The " centrifugal " force of circumstances has now reversed the " guarantees " required, but it may be hoped that, as the States more than recovered their high credit without any other aid than industrial energy, so may that of the Union again take its foremost rank.

The proposition to obtain the indorsements of the States was objected to in the House. The bill authorizing \$25,000,000 passed without it, and the Secretary issued, under it, February 13, proposals for \$8,000,000, to be opened by the 23d. The bonds were to run twenty years, and bear 6 per cent coupons. The law is as follows :—

AN ACT AUTHORIZING A LOAN.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the President of the United States be and is hereby authorized, at any time before the first day of July next, to borrow, on the credit of the United States, a sum not exceeding twenty-five millions of dollars, or so much thereof as, in his opinion, the exigencies of the public service may require, to be used in the payment of the current demands upon the treasury and for the redemption of treasury notes now outstanding, and to replace in the treasury any amount of said notes which shall have been paid and received for public dues.

SEC. 2. And be it further enacted, That stock shall be issued for the amount so borrowed, bearing interest not exceeding six per centum per annum, and to be reimbursed within a period not beyond twenty years and not less than ten years ; and the Secretary of the Treasury be and is hereby authorized, with the consent of the President, to cause certificates of stock to be prepared, which shall be signed by the Register and sealed with the seal of the Treasury Depart-

ment, for the amount so borrowed, in favor of the parties lending the same, or their assigns, which certificates may be transferred on the books of the treasury, under such regulations as may be established by the Secretary of the Treasury: Provided, That no certificate shall be issued for a less sum than one thousand dollars: And provided, also, That, whenever required, the Secretary of the Treasury may cause coupons of semi-annual interest payable thereon to be attached to certificates issued under this act; and any certificate with such coupons of interest attached may be assigned and transferred by delivery of the same, instead of being transferred on the books of the treasury.

SEC. 3. And be it further enacted, That, before awarding said loan, the Secretary of the Treasury shall cause to be inserted in two of the public newspapers of the city of Washington, and in one or more public newspapers in other cities of the United States, public notice that sealed proposals for such a loan will be received until a certain day, to be specified in such notice, not less than ten days from its first insertion in a Washington newspaper; and such notice shall state the amount of the loan, at what periods the money shall be paid, if by instalments, and at what places. Such sealed proposals shall be opened, on the day appointed in the notice, in the presence of such persons as may choose to attend, and the proposals decided on by the Secretary of the Treasury, who shall accept the most favorable offered by responsible bidders for said stock. And the said Secretary shall report to Congress, at the commencement of the next session, the amount of money borrowed under this act, and of whom and what terms it shall have been obtained, with an abstract or brief statement of all the proposals submitted for the same, distinguishing between those accepted and those rejected, with a detailed statement of the expense of making such loans.

SEC. 4. And be it further enacted, That the faith of the United States is hereby pledged for the due payment of the interest and the redemption of the principal of said stock.

SEC. 5. And be it further enacted, That the residue of the loan authorized by the act of 22d of June, 1860, or so much thereof as is necessary, shall be applied to the redemption of the treasury notes issued under the act of 17th of December, 1860, and for no other purpose; and the Secretary of the Treasury is hereby authorized, at his discretion, to exchange at par bonds of the United States authorized by said act of 22d of June, 1860, for the said treasury notes and the accruing interest thereon.

SEC. 6. And be it further enacted, That, to defray the expense of engraving and printing certificates of such stock, and other expenses incident to the execution of this act, the sum of twenty thousand dollars is hereby appropriated: Provided, That no compensation shall be allowed for any service performed under this act to any officer whose salary is established by law.

SEC. 7. And be it further enacted, That the Secretary of the Treasury shall not be obliged to accept the most favorable bids as hereinbefore provided, unless he shall consider it advantageous to the United States to do so, but for any portion of such loan, not taken under the first advertisement, he may advertise again at his discretion.

Approved, Feb. 8, 1861.

The rates of money for commercial paper have continued to decline on call, but have rather advanced for long paper, seeing that the best descriptions are, by the stagnation of business and the operations of payment, being called out:

	On call.		Indorsed.		Single names.	Other good.	Not well known.
	Stocks.	Other.	60 days.	4 a 6 mos.			
Jan. 1st, 1860..	6 a 6½	6½ a 7	7 a 7½	7½ a 8½	7½ a 8	9 a 10	12 a 18
Jan. 15th.....	7 a 7½	7 a 7½	8½ a 9	9 a 9½	9 a 10	10 a 11	15 a 20
Feb. 1st.....	6 a 6½	7 a 7½	8½ a 9	9 a 9½	9 a 10	11 a 12	15 a 20
Feb. 15th.....	5 a 6	6 a 7	7 a 7½	7½ a 8	8½ a 9½	10 a 12	15 a 18
Mar. 1st.....	5½ a 6	6 a 7	7 a 7½	7½ a 8	8½ a 9½	10 a 12	15 a 18
Mar. 15th.....	5 a 5½	5½ a 6	6 a 7	7½ a 8	8½ a 9½	10 a 12	15 a 18
Apr. 1st.....	5 a 5½	6 a 6½	5½ a 6	6 a 6½	5½ a 7½	9 a 10	11 a 13

	On call.		Indorsed—		Single	Other	Not well
	Stocks.	Other.	60 days.	4 a 6 mos.	names.	good.	known.
Apr. 15th.....	5 a 5½	6 a 6½	5½ a 6	6 a 6½	6½ a 7½	9 a 10	11 a 13
May 1st.....	5 a 5½	6 a 6½	5 a 6	6 a 6½	6½ a 7½	9 a 10	11 a 12
May 15th.....	5 a 6	6 a 6½	5 a 6	6 a 7	6½ a 7½	9 a 10	10 a 12
June 1st.....	4½ a 5	6 a 6½	5 a 6	6 a 7	6½ a 7½	8 a 9	9 a 10
June 15th.....	4½ a 5	5 a 6	4½ a 5	5 a 6½	5½ a 6	6 a 7½	8 a 9
July 1st.....	5 a 5½	5½ a 6	.. a 5	5 a 6	5½ a 6	7 a 7½	8 a 9
July 15th.....	5 a 5½	5½ a 6	.. a 5	5 a 6	5½ a 6	7 a 7½	8 a 9
Aug. 1st.....	5 a 6	6 a 7	5 a 6	6 a 6½	6½ a 7	7½ a 8½	9 a 10
Aug. 15th.....	5½ a 6	6 a 7	6 a 6½	6 a 7	6½ a 7½	8 a 9	9 a 10
Sept. 1st.....	6 a 7	7 a 9	6½ a 7	7 a 9	8 a 9	9 a 12	12 a 24
Sept. 15th.....	6 a 7	6½ a 7	7 a 7½	7½ a 8	6½ a 7½	9 a 9½	10 a 10½
Oct. 1st.....	6½ a 7	7 a 8	6½ a 7	6½ a 7½	8 a 8½	9 a 10	12 a 20
Oct. 15th.....	6½ a 7	7 a 8	6½ a 7	6½ a 7½	8 a 8½	9 a 10	12 a 20
Nov. 1st.....	6½ a 7	7 a 8	6½ a 7	7 a 7½	8 a 9	10 a 12	12 a 15
Nov. 15th.....	7 a 8	7 a 9	8 a 9	9 a 10	9 a 12	14 a 15	15 a 24
Dec. 1st.....	7 a 9	9 a 10	10 a 12	12 a 15	15 a 18	24 a 26	.. a ..
Dec. 15th.....	6 a 7	9 a 11	12 a 15	15 a 18	20 a ..	.. a ..	.. a ..
Jan. 1st, 1861.	5½ a 6½	8 a 10	10 a 12	13 a 15	18 a ..	.. a ..	.. a ..
Jan. 15th.....	5 a 6	6 a 7	7 a 8	8 a 9	8 a 10	12 a 16	18 a 24
Feb. 1st.....	5 a 6	6 a 7	7 a 8	8 a 9	8 a 10	12 a 15	18 a 24
Feb. 15th.....	5 a 6	.. a 7	7½ a 8	8 a 9	8 a 10	12 a 15	18 a 24

There is a great scarcity of good business paper. The state of the foreign markets is such that, in connection with the abundance of produce here and the low rates at which, under present circumstances, it is held, encourages the hope of very large exports, which, of course, must be modified by any change in the rates of money in London and Paris, arising from the flow of specie to this country, or the occurrence of war.

The imports of dry goods for the month of January have not been much less than last year, since they have been the fulfillments of previous orders. The amount put upon the market has however undergone great reduction. The condition of trade generally, and the prospect of the passage of a high tariff, will no doubt keep down the imports for a number of months to come. The comparative aggregates of the trade of the port for some years have been as follows. The amount of specie imported figures unusually large :—

IMPORTS AT NEW YORK FOR THE MONTH OF JANUARY.

Years.	Specie.	Dry goods.	Other.	Total.
1855.....	\$90,284	\$5,680,393	\$7,885,450	\$12,945,827
1856.....	54,364	10,686,771	4,887,989	15,578,064
1857.....	886,609	10,886,476	7,738,747	19,006,732
1858.....	809,572	2,866,144	4,980,008	8,105,719
1859.....	71,308	10,575,587	8,801,067	19,447,962
1860.....	228,050	11,770,005	9,758,284	21,756,273
1861.....	7,262,229	10,956,857	8,608,325	26,827,411

The aggregate imports for the month it appears, have been very large, exceeding those of any year previous to 1860, and the increase has been mostly in dry goods. The imports, including warehousing, have been as follows :—

FOREIGN IMPORTS AT NEW YORK IN JANUARY.

	1858.	1859.	1860.	1861.
Entered for consumption.....	\$4,170,017	\$15,556,727	\$16,528,174	\$8,178,837
Entered for warehousing	1,909,448	1,201,707	2,744,411	8,560,680
Free goods	1,716,682	2,618,220	2,262,638	3,825,665
Specie and bullion	309,572	71,308	228,050	7,262,229
Total entered at the port	\$8,105,719	\$19,447,962	\$21,756,273	\$26,827,411
Withdrawn from warehouse.....	4,504,691	2,088,290	2,964,024	2,543,278

The quantity is again larger than last year, but this arises from the large receipts of specie. The large arrivals have caused a considerable increase in the quantity in bond during the month.

The following is a comparative summary of the imports from July 1st. The total for the seven months, ending with January, is nearly \$10,000,000 more than the corresponding total of the previous year, as will appear from the following statement:—

FOREIGN IMPORTS AT NEW YORK FOR SEVEN MONTHS, ENDING JANUARY 31st.

	1858.	1859.	1860.	1861.
Entered for consumption.....	\$61,869,156	\$82,178,944	\$101,456,920	\$82,893,646
Entered for warehousing.....	84,137,001	14,600,978	20,853,081	34,386,963
Free goods.....	18,982,671	13,192,418	14,028,386	14,661,464
Specie and bullion.....	7,855,593	557,065	1,918,528	15,427,722
Total entered at the port.....	117,794,421	110,580,895	137,756,915	147,369,795
Withdrawn from warehouse....	31,969,220	17,650,884	18,305,392	19,331,540

The proportions entered for warehouse, it will be seen, are as large as for the same period of 1858, which embraced the panic of the fall of 1857. The specie arrivals have been very large. The following table will show the proportion borne by dry goods in the January returns:—

IMPORTS OF FOREIGN DRY GOODS AT NEW YORK FOR THE MONTH OF JANUARY.

ENTERED FOR CONSUMPTION.

	1858.	1859.	1860.	1861.
Manufactures of wool.....	\$886,158	\$2,290,857	\$2,442,249	\$1,819,912
Manufactures of cotton.....	883,621	3,060,040	2,406,778	783,748
Manufactures of silk.....	533,080	3,071,082	4,554,640	1,494,636
Manufactures of flax.....	183,388	1,035,455	735,256	383,677
Miscellaneous dry goods.....	160,681	569,296	480,340	391,993
Total.....	\$1,596,928	\$10,026,730	\$10,619,271	\$4,822,966

WITHDRAWN FROM WAREHOUSE.

	1858.	1859.	1860.	1861.
Manufactures of wool.....	\$414,023	\$193,123	\$252,225	\$292,902
Manufactures of cotton.....	594,622	404,310	575,027	308,304
Manufactures of silk.....	616,369	126,117	331,376	308,107
Manufactures of flax.....	325,464	175,875	146,615	165,848
Miscellaneous dry goods.....	161,681	56,592	76,584	86,351
Total.....	\$2,112,159	\$955,755	\$1,381,827	\$1,161,512
Add entered for consumption....	1,596,923	10,026,730	10,619,271	4,822,966
Total thrown on market....	\$3,709,082	\$10,982,445	\$12,001,098	\$5,984,478

ENTERED FOR WAREHOUSING.

	1858.	1859.	1860.	1861.
Manufactures of wool.....	\$215,866	\$122,326	\$410,357	\$1,770,623
Manufactures of cotton.....	423,772	252,675	368,950	1,942,394
Manufactures of silk.....	425,444	104,264	249,875	1,683,536
Manufactures of flax.....	115,141	58,791	67,492	507,480
Miscellaneous dry goods.....	88,998	10,811	54,060	229,858
Total.....	\$1,269,221	\$548,857	\$1,150,784	\$6,133,891
Add entered for consumption...	1,596,923	10,026,730	10,619,271	4,822,966
Total entered at the port...	\$2,866,144	\$10,575,587	\$11,770,005	\$10,956,857

The consumption of dry goods for the seven months of the year shows a very large increase, being larger than for the same period of any previous year :—

IMPORTS OF FOREIGN DRY GOODS AT THE PORT OF NEW YORK FOR SEVEN MONTHS ENDING JANUARY 28TH.

ENTERED FOR CONSUMPTION.

	1858.	1859.	1860.	1861.
Manufactures of wool.....	\$12,395,372	\$14,353,737	\$19,925,715	\$17,966,790
Manufactures of cotton.....	5,576,268	9,176,748	11,950,149	5,928,979
Manufactures of silk.....	11,504,000	14,294,092	21,504,310	17,396,886
Manufactures of flax.....	2,345,427	4,297,704	5,577,833	3,124,489
Miscellaneous dry goods...	2,557,291	2,718,388	3,869,042	3,752,608
Total.....	\$34,378,358	\$44,845,639	\$62,326,949	\$48,169,752

WITHDRAWN FROM WAREHOUSE.

	1858.	1859.	1860.	1861.
Manufactures of wool.....	\$4,536,012	\$2,610,972	\$2,362,047	\$2,268,396
Manufactures of cotton.....	1,797,956	1,091,315	1,080,439	1,033,460
Manufactures of silk.....	3,621,985	994,717	824,700	928,996
Manufactures of flax.....	1,085,068	849,090	560,423	510,738
Miscellaneous dry goods.....	693,528	615,339	334,061	265,480
Total.....	\$11,784,549	\$6,161,933	\$5,161,684	\$5,007,020
Add entered for consumption..	34,378,358	44,845,639	62,326,949	48,169,752
Total thrown upon market.	\$46,162,907	\$51,007,572	\$67,488,633	\$53,176,772

ENTERED FOR WAREHOUSING.

	1858.	1859.	1860.	1861.
Manufactures of wool.....	\$4,132,128	\$1,221,679	\$2,499,925	\$4,751,965
Manufactures of cotton.....	3,093,874	921,338	1,971,196	4,939,732
Manufactures of silk.....	3,249,066	488,977	1,072,913	3,673,569
Manufactures of flax.....	1,589,525	420,266	656,708	1,898,299
Miscellaneous dry goods....	1,229,611	262,848	430,045	795,166
Total.....	\$13,225,203	\$3,315,153	\$6,630,787	\$16,058,731
Add entered for consumption.	34,378,358	44,845,639	62,336,949	48,169,752
Total entered at the port.	\$47,613,561	\$48,160,797	\$68,957,736	\$64,228,483

The warehouse operations have been larger than ever before in the same period, and on this accumulation it is threatened by the tariff before Congress to compel duties by abolishing the warehousing privilege.

The exports from New York to foreign ports for the month of January show an increase in domestic produce, as well breadstuffs as cotton; but the specie export has been unimportant.

EXPORTS FROM NEW YORK TO FOREIGN PORTS FOR THE MONTH OF JANUARY.

	1858.	1859.	1860.	1861.
Domestic produce.....	\$4,203,306	\$3,762,182	\$5,299,142	\$10,277,925
Foreign merchandise (free).....	191,125	119,439	224,003	399,940
Foreign merchandise (dutiable)....	290,308	232,337	399,317	465,978
Specie and bullion.....	4,745,611	2,305,638	853,562	58,894
Total exports.....	\$9,435,350	\$6,419,696	\$6,876,324	\$11,202,789
Total, exclusive of specie.....	4,689,739	4,114,008	6,022,462	11,143,845

The total exports at the port of New York since July 1st, (exclusive of specie,) are much larger than for the same period of the last or any preceding years, and, including specie, reached a very high figure :—

EXPORTS FROM NEW YORK TO FOREIGN PORTS FOR SEVEN MONTHS, ENDING JANUARY 31.

	1858.	1859.	1860.	1861.
Domestic produce.....	\$31,559,901	\$29,181,498	\$36,798,091	\$66,990,359
Foreign merchandise (free).....	2,512,724	928,039	1,989,566	909,175
Foreign merchandise (dutiable)...	5,319,505	2,089,310	3,660,863	8,138,743
Specie and bullion.....	26,707,723	15,947,160	27,371,456	20,670,300
Total exports.....	\$66,089,908	\$48,066,002	\$79,764,976	\$91,738,577
Total, exclusive of specie...	39,392,180	32,108,842	42,393,520	71,068,277

We also annex a comparative summary of the receipts of cash duties at the port of New York :—

CASH DUTIES RECEIVED AT NEW YORK.

	1858.	1859.	1860.	1861.
Six months ending Jan. 1	\$16,345,558 57	\$15,387,618 49	\$19,322,060 96	\$17,637,708
In January.....	1,641,474 59	3,478,476 38	3,898,166 17	2,059,202
Total seven months	\$17,987,028 16	\$18,866,089 87	\$23,221,227 13	\$19,696,905

JOURNAL OF BANKING, CURRENCY, AND FINANCE.**CITY WEEKLY BANK RETURNS.**

BOSTON BANKS.—(CAPITAL, JAN., 1859, \$35,125,433; 1860, \$37,258,600.)

	Loans.	Specie.	Circulation.	Deposits.	Due to banks.	Due from banks.
Jan. 7	62,025,734	4,204,610	7,032,018	18,719,190	7,668,862	8,371,504
14	62,720,067	4,199,155	6,825,325	18,422,650	8,082,942	7,605,680
21	63,275,167	4,425,256	6,706,045	18,866,511	8,346,141	7,094,433
24	63,237,796	4,532,019	6,374,476	18,185,128	8,477,340	6,714,029
Feb. 4	63,264,318	4,629,068	6,247,643	18,184,009	8,485,630	6,563,176
11	63,434,382	4,573,614	6,387,552	18,074,898	8,318,692	6,299,117

PHILADELPHIA BANKS.—(CAPITAL, JAN., 1860, \$11,783,190.)

	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan. 7....	26,891,280	4,020,266	2,689,812	15,261,925	3,593,785
14....	26,555,986	4,151,824	2,694,217	15,001,591	3,464,167
21....	26,172,473	4,263,105	2,754,315	14,750,382	3,416,292
28....	25,892,265	4,443,781	2,737,638	14,891,200	3,143,795
Feb. 4....	25,801,981	4,588,054	2,778,318	15,295,453	2,699,627

NEW ORLEANS BANKS.—(CAPITAL, JAN., 1860, \$18,917,600.)

	Short loans.	Specie.	Circulation.	Deposits.	Exchange.	Distant balances.
Jan. 5 ..	17,229,569	14,244,084	6,204,384	17,443,181	6,969,916	1,285,375
12 ..	16,756,868	15,581,142	6,377,069	18,345,680	7,017,014	1,202,133
19 ..	16,318,118	15,721,856	6,664,554	17,745,829	7,356,686	1,469,546
26 ..	15,987,904	16,289,892	6,988,031	18,443,144	8,987,904	1,263,522

PITTSBURG BANKS.—(CAPITAL, \$4,160,200.)

	Loans.	Specie.	Circulation.	Deposits.	Due banks.
Jan. 7.....	7,254,136	1,356,892	2,609,006	1,891,947	217,108
14.....	7,164,487	1,400,357	2,609,056	1,927,290	205,148
21.....	7,215,946	1,400,485	2,662,671	1,733,946	233,858
28.....	7,123,312	1,425,592	2,686,706	1,687,037	242,595
Feb. 4.....	7,099,421	1,449,036	2,642,821	1,701,427	233,634

The Missouri banks, with the exception of the Exchange Bank of St. Louis suspended specie payments. E. D. JONES, Esq., was chosen cashier, rice

ROBERT CARR resigned. The condition of the bank January 31, 1860, was as follows:—

EXCHANGE BANK OF ST. LOUIS AND BRANCHES, FOR THE QUARTER ENDING DECEMBER 31st, 1860.

RESOURCES.

Notes discounted	\$316,129 16	
State bonds	70,000 00	
Exchange maturing	975,444 31	
		\$1,861,573 47
Due from banks		92,815 93
Suspended debt		29,556 22
Real estate (for debt)		3,851 81
Cash on hand, viz.:—Coin		332,214 98
Notes of other banks		184,120 56
		<u>\$1,954,132 97</u>

LIABILITIES.

Capital stock	\$1,000,000 00
Due to banks	118,872 65
Due to individual depositors	341,442 22
Circulation outstanding	387,720 00
Dividend unclaimed	67 39
Contingent fund	3,533 82
Profit and loss	102,696 89
	<u>\$1,954,132 97</u>

Contingent fund, and profit and loss as above .	\$106,280 71
Deduct dividend No. 5, declared this day	39,571 88

Leaves contingent fund, and profit and loss this day	66,658 83
--	-----------

THE BANKS IN SOUTH CAROLINA.

The average weekly condition of the banks in this State, from their returns to the Controller-general, for the month of October, is as in the following synopsis:—

LIABILITIES.

Capital	\$14,952,486 88
Circulation	6,435,242 43
Profits on hand	2,130,836 77
Due banks	3,201,495 13
Deposits	8,497,122 05
Due State	2,925,012 28
Other items	241,430 36

RESOURCES.

Specie	\$1,405,898 43
Real estate	684,144 28
Bank notes	376,030 35
Due from banks	773,936 54
Discounts	12,674,949 44
Domestic exchange	10,306,608 70
Foreign exchange	258,192 15
Bonds and stocks	2,903,971 76
Suspended debt	1,482,976 81
Branches	1,674,048 17
State	140,381 23
Other items	695,538 04

Total liabilities ... \$33,383,625 90

Total resources.... \$33,383,625 90

By comparing this statement with that of the previous month, we note an increase in circulation of \$346,206 25; an increase in domestic exchange of \$911,319; an increase in foreign exchange of \$92,371; an increase in discounts of \$5,298; and a decrease in specie to the extent of \$276,438.

COINAGE OF THE UNITED STATES.

The coinage of the last fiscal year was \$27,039,919 and 61 cents, viz.:

	No. of pieces.	Value.
Gold double eagles.....	772,940	\$15,458,000 00
" eagles.....	84,218	842,180 00
" half eagles.....	72,218	861,145 00
" three dollars.....	20,402	61,206 00
" quarter eagles.....	51,592	128,980 00
" dollars.....	93,215	93,215 00
" fine bars.....	.....	7,001,807 85
	<hr/>	<hr/>
	1,044,591	\$23,447,283 85
Silver dollars.....	600,580	600,580 00
" half dollars.....	3,254,800	1,627,400 00
" quarter dollars.....	1,821,800	880,450 00
" dimes.....	986,000	98,600 00
" half dimes.....	1,980,000	96,500 00
" three cent pieces.....	548,000	16,440 00
" bars.....	.....	480,716 26
	<hr/>	<hr/>
	8,641,180	\$3,250,686 26
Cents.....	84,200,000	342,000 00

RECAPITULATION OF COINAGE FOR THE YEAR.

Gold.....	\$23,447,283 85
Silver.....	3,250,686 26
Copper.....	342,000 00

One year to June 30, 1860..... \$27,039,919 61

This sum was coined at the following points last year, and from the commencement of coinage, (1792) :—

	1859-1860.	1792-1860.
Philadelphia.....	\$5,553,653 14	\$428,426,504 24
New Orleans.....	1,767,422 88	69,201,833 80
San Francisco.....	12,461,911 52	118,029,225 26
Dahlonega, Ga.....	69,477 00	6,060,973 00
Charlotte, N. C.....	133,697 50	4,978,061 50
New York Assay-office.....	7,053,758 12	94,532,996 76
	<hr/>	<hr/>
Total.....	\$27,039,919 61	\$716,229,594 56

One extraordinary feature of the year has been the decline in the quantity of gold deposited from California, etc., as compared with former year, viz :—

States.	One year—1859-60.	Total to 1860.
California.....	\$18,095,163	\$469,406,033 84
Kansas.....	622,264	626,436 00
Virginia.....	21,604	1,547,420 12
Georgia.....	62,513	6,863,392 66
North Carolina.....	156,181	9,100,591 87
South Carolina.....	2,004	1,282,609 23
Tennessee.....	595	81,406 75
Oregon.....	2,780	.....
Alabama.....	661	197,420 07
Utah.....	4,680	4,680 00
Arizona.....	1,100	1,100 00
Nebraska.....	1,402	1,402 01
New Mexico.....	.....	190,968 16
	<hr/>	<hr/>
	\$18,971,041	\$489,812,520 21

California, (parted from gold)	\$188,561	North Carolina.....	12,257
Utah (Washoe)	102,540	Sonora.....	1,200
Lake Superior	25,880		
Arizona.	18,357		\$298,797

The coinage last year was \$27,039,919, whereas, for 1851 to 1856, it ranged from 56 to 64,000,000 per year. The large exports from California direct to China and to Europe, will, in part, account for this remarkable change.

RATE OF INTEREST IN LONDON.

The alterations in bank discounts during 1859 and 1860, with the amount of bank notes issued, and of bullion held at the respective periods, the price of three per cent consols on the days of change, are shown in the following table :

Price of consols.	Date.	Interest. Rate per cent.	Bullion.	Bank notes issued.		Total.
				Held by the public.	In reserve by Bank of Eng.	
90½ a 88½	April 28....	3½	£17,640,842	£21,988,625	£9,496,545	£31,435,270
90½ a 89½	May 5.....	4½	17,205,480	22,255,585	8,790,350	31,046,085
93½ a 93½	June 2.....	3½	17,764,596	21,092,350	10,478,390	31,570,745
94 a 93½	June 9.....	3	17,957,887	21,134,345	10,607,545	31,741,890
95½ a 95½	July 14.....	2½	17,941,791	21,712,580	10,100,525	31,813,055
95½ a 95½	Jan. 19, 1860	3	15,884,498	22,053,140	7,589,865	29,648,005
94½ a 93½	Jan. 31.	4	14,942,502	21,906,340	6,846,370	28,752,710
94½ a 94½	March 29....	4½	15,271,701	20,980,355	8,082,685	29,063,640
94½ a 94	April 12 ...	5	14,637,102	23,467,255	4,922,085	28,899,340
95½ a 95½	May 10.....	4½	14,588,780	21,880,735	7,182,845	29,068,580
95½ a 95½	May 25.....	4	15,004,390	22,223,290	8,346,100	29,569,390
98½ a 93½	Nov. 8.....	4½	14,127,878	21,503,430	6,359,120	27,862,550
98½ a ...	Nov. 13.....	5	13,897,085	21,206,070	6,429,370	27,635,440

FRENCH FINANCE.

Now that the attention of the commercial community in this country is in an especial manner directed to the operations of the Bank of France, it may be considered a fitting moment to take a brief glance at the financial position and fiscal burthens of the French nation. We will confine ourselves to citing a few pregnant figures : In the year 1814 the national debt of France was £50,646,108. In thirty-eight years, that is to say in 1852, it had increased to £23,825,492. It is now £356,883,871 ; so that in the last eight years it has increased no less than £143,058,379. In 1855 the annual charge of the public debt of France was stated to be £9,000,000, whilst in January of the present year it was admitted to be £16,000,000, and is probably much more. We have not space to enter into, nor the full particulars of, the manner in which this large increase has arisen in so short a space of time. In France the financial secrets of the government are well kept. But it is a terrible fact that in the face of the unprecedented amount of taxation with which France is at present burthened, it is even now necessary to add largely year after year to the national debt.

During the same space of forty years, the English national debt has undergone several alterations, sometimes rising and sometimes falling, but it is at present very little more than it was in 1820, when it stood at £790,000,000, whilst the charge on debt has considerably lessened. It may convey a lesson to those who complain so bitterly of our system of taxation if we place in juxtaposition the account of the revenue of the two countries. It will be seen that France actually outstrips us in the amount of her revenue from taxation. At

the same time, it must be borne in mind that the figures do not include any local taxation, which in many towns in France, as here, is considered very great; it is especially heavy in Paris.

REVENUE OF GREAT BRITAIN FOR 1860.

1 Income tax.....	£12,903,715
2 Stamps.....	8,040,091
3 Crown lands.....	416,581
4 Customs.....	24,391,084
5 Excise.....	20,240,467
6 Post-office.....	2,300,000
7 Miscellaneous.....	1,801,584

Total..... £71,104,127

REVENUE OF FRANCE FOR 1860.

1 Direct taxes, land, house, personal, and patents.....	£18,000,000
2 Stamps and domains.....	14,300,000
3 Woods, forests, & fisheries..	1,500,000
4 Customs and tax on salt..	9,100,000
5 Excise.....	19,500,000
6 Post-office.....	2,800,000
7 Miscellaneous.....	7,500,000

Total..... £73,000,000

It must be difficult—nay, impossible—for France to continue for any long period the immense sacrifices she is now called upon to make. Unless the heavy load of taxation which she is now forced to bear be speedily mitigated, the effects will be most lamentable. There is a point beyond which nations, any more than individuals, cannot carry their expenditure without tempting ruin.

SALES OF REAL ESTATE IN RICHMOND, VA.

We subjoin a comparative statement of the amounts of real estate, within the corporate limits, sold at auction during the past three years :—

	1855.	1859.	1860.
January.....	29,540	10,771	87,416
February.....	20,269	25,162	31,060
March.....	31,292	53,563	33,209
April.....	82,082	118,461	40,573
May.....	24,212	66,785	68,558
June.....	62,094	52,791	29,591
July.....	55,203	29,300	100,183
August.....	4,355	14,755	24,567
September.....	23,440	29,429	47,357
October.....	27,882	73,074	36,587
November.....	38,418	7,656	5,885
December.....	20,570	36,630	35,835
Total.....	419,357	518,327	540,816

The total for 1857 was \$213,400, so that the sales have doubled in three years. A very large amount of real estate in that city is sold privately, by agents and owners, but the auction sales afford some indication of the extent of the business each year.

COMPARATIVE PURITY OF GOLD FROM MODERN MINES.

The value of the products of the modern gold fields differs more widely than would be imagined. Absolutely pure gold, free from admixture with any foreign substance, is never met with. There is always some less valuable metal contained in the yellow nugget, or the glittering dust. The process of determining the exact amount of gold present in a given quantity, is termed assaying. It is done by melting the metal into a homogeneous mass, and subjecting a thin fragment of it to minute chemical analysis. The exact proportion of gold to other matter, is thus arrived at, and if it is desired to exclude all but the gold, the process of refinement is resorted to. The old method of estimating the fineness

of gold by carats, twenty-four carats being pure gold, has been abandoned in our mint, and a new standard adopted. The fineness of gold is now stated by the decimals of one thousand : thus gold .750 fine is equal to the eighteen carat gold of the jewellers, and .900 fine is the standard for coin. Of the gold which has been received and assayed at our mint, that of Australia is the finest, some having been assayed .980 fine ; or containing only twenty parts in a thousand of foreign matter. The specimens received from North Carolina vary very much in value, some having turned out as fine as Australian, while others were but .580 fine. North Carolina and Georgia continue to furnish some gold, but Virginia and Tennessee have almost entirely ceased to be gold-mining States. It is asserted that numerous nuggets of gold have lately been sold in Quebec by some of the French inhabitants of Lower Canada, and the existence of gold fields in that country is positively asserted. It is said that the peasant miners keep the matter a profound secret and dispose of their gold in the most secret and mysterious manner. If any gold fields exist, and traces of gold have been found in the streams, the public attention now directed to it, will soon make known the secret of the peasants. But as in North Carolina and Georgia, the golden treasure may be so fast locked into the earth as to require the expenditure of its full value to release it. We give below the range of fineness of the gold which is deposited in the mint from the following places, for which we are indebted to JAMES R. SNOWDEN, Esq., the director of the mint :—

Australia.....	.960 to .980	North Carolina.....	.840 to .845
Georgia.....	.940 to .960	New Granada.....	.825 to .875
Santa Fe, New Mexico.....	.940 to .952	Kansas.....	.820 to .840
California.....	.860 to .900		

It is interesting to know, that with our other material and industrial resources, we take a very high, if not the highest, rank as a gold-producing country. Since the establishment of the mint, and up to June, 1859, the deposits of American gold, the produce of native mines, has been as follows :—

California.....	\$451,310,840 26	Oregon.....	69,292 00
Georgia.....	6,800,879 32	New Mexico.....	48,672 00
North Carolina.....	8,944,409 39	Kansas.....	4,171 70
Virginia.....	1,595,515 50	Other States.....	79,224 00
South Carolina.....	1,280,604 87		
Alabama.....	196,758 54	Total.....	\$470,341,478 46
Tennessee.....	80,810 87		

The above large sum was deposited at the following places ; the first column represents the deposits of gold of American production only, and the second column the coinage of both native and foreign gold, silver, and copper up to June 30, 1859 :—

Philadelphia.....	\$238,305,639 48	\$417,872,851 10.
San Francisco.....	106,641,697 73	105,567,313 74
New Orleans.....	22,293,827 91	67,484,411 47
Charlotte, N. C.....	4,868,525 67	4,814,364 00
Dahlonega, Ga.....	5,988,635 69	5,991,496 09
Assay-office, N. Y.....	92,243,151 98	87,479,238 64
Total.....	\$470,341,478 46	\$689,189,674 95

The report of the director of the mint up to 30th June, 1860, will be presented to Congress in December, with the annual report of the Secretary of the Treasury.

LOUISIANA STATE ASSESSMENT FOR 1860.

The following is the State assessment of taxes in the city of New Orleans for the year 1860:—

	Value of real estate.	No. of slaves.	Value of slaves.	Horses, cows, and carriages.
First	\$6,805,650	1,296	\$771,200	\$111,625
Second	8,482,150	1,803	1,082,950	179,975
Third	25,487,700	1,502	911,250	240,425
Fourth	11,204,050	960	590,250	116,700
Fifth	8,202,100	1,381	816,650	138,030
Sixth	5,115,300	1,222	724,890	55,250
Seventh	4,921,200	743	476,400	122,050
Eighth	2,366,050	256	164,400	55,850
Ninth	3,404,400	600	356,350	150,625
Tenth	8,879,525	1,551	380,900	133,250
	\$84,488,155	11,316	\$6,785,240	\$1,298,770
	Stocks in vessels.	Capital at interest.	Licenses.	Polls.
First	\$8,000	\$198,000	\$10,235	669
Second	10,000	542,800	26,775	2,064
Third	692,675	21,445,255	116,565	5,237
Fourth	4,000	4,599,800	29,280	969
Fifth	5,000	1,726,650	27,345	1,123
Sixth .....	....	339,050	14,085	697
Seventh .....	....	226,050	8,600	381
Eighth	\$13,000	397,150	8,595	384
Ninth .....	....	121,425	6,595	530
Tenth	4,000	221,550	12,690	1,205
	\$1,036,675	\$29,712,730	\$260,715	13,259
Total			\$122,771,540	
Licenses			260,715	
Polls				13,259

TAX ASSESSMENTS OF HAMILTON COUNTY, OHIO.

Below will be found a table showing the value of real and personal property, and total tax levied from the year 1829 to 1859. It was carefully prepared by EDWARD T. LEA, Esq., of the Auditor's office.

It will be seen that the difference in favor of 1859, during the thirty years, is, for real property, \$77,720,830; personal property, \$35,772,775; total value, \$113,493,614; total tax, \$1,933,312 71:—

Year.	Value of real property.	Value of personal property.	Total value.	Total tax.
1829	\$4,604,017	\$1,410,539	\$6,014,556	\$63,280 02
1835	7,346,666	2,025,678	9,372,339	137,255 10
1841	5,805,450	4,955,040	10,760,494	240,327 80
1847	40,532,750	11,527,796	52,060,546	445,151 91
1853	58,985,950	37,812,829	117,821,629	1,884,433 56
1859	82,324,856	37,188,314	119,508,170	1,996,592 73

FRENCH COINAGE.

In 1849 the mint of Paris coined 91,397,849*l.* in gold, and 80,643,108*l.* in silver. In 1859 the amount struck off was 53,225,846*l.* in gold, and only 5,375,341*l.* in silver. This fact accounts for the great quantity of gold in circulation and the penury of silver coin.

MASSACHUSETTS VALUATION.

The following table shows the valuation, with the tax upon polls at the rate of half a mill each as established by law, for \$1,000, and the residue of the tax upon property :—

	1850.		1860.			
	Valuation.	Polls.	Tax on polls.	Property.	Tax on property.	Total tax.
Suffolk.....	\$217,537,172 00	41,905	\$20 95	\$320,000,000	\$303 46	\$324 41
Essex.....	56,556,466 89	29,779	19 89	84,637,837	80 26	100 15
Middlesex....	88,264,719 50	51,763	25 88	185,458,009	128 46	154 34
Worcester ...	55,497,794 00	41,320	20 66	75,412,160	71 51	92 17
Hampshire...	13,351,240 00	9,408	4 71	17,787,649	16 82	21 53
Hampden....	22,621,220 77	14,469	7 24	26,252,668	24 90	32 14
Franklin.....	11,211,309 00	8,263	4 13	12,448,961	11 81	15 94
Berkshire	17,197,607 00	12,344	6 42	24,186,982	22 94	29 36
Norfolk.	47,034,521 56	26,826	13 41	86,800,899	82 31	95 72
Bristol.	39,243,560 00	22,481	11 24	63,294,256	62 87	74 11
Plymouth....	19,200,668 00	16,961	8 48	29,160,937	27 65	36 13
Barnstable....	8,897,349 74	8,506	4 25	12,621,201	11 97	16 22
Dukes county.	1,698,005 00	1,199	60	2,908,194	2 76	3 36
Nantucket....	4,695,362 00	1,500	75	8,875,598	3 67	4 42
Total.....	\$597,936,995 46	297,224	\$148 61	\$897,795,326	\$851 39	\$1,000 00

It will be observed that the State valuation of 1860, as above stated, is \$299,858,330 in excess of the State valuation of 1850, which is an increase of about 46 per cent.

The State valuation of 1850 was.....	\$597,936,995 46
City and town valuations of 1857, aggregate.....	824,518,925 18
City and town valuations of 1853, aggregate.....	813,776,483 06
City and town valuations of 1859, aggregate.....	840,923,927 00
State valuation of 1860, as above.....	897,795,326 00

THE GOLD LOAN TO FRANCE.

On the 21st of November, it was announced in London that an arrangement had been made between the Bank of France and the Bank of England, which, it was hoped, would terminate the uncertainties that had recently disturbed the money markets of Paris and London. The *London Times* says that the Bank of France are to have a loan of £2,000,000 of gold from the Bank of England on the security of a deposit of silver to an equal amount. The first remark on this will be, "How can such an arrangement strengthen the position of the Bank of France? It is the drain of specie that has been the serious feature, and no change in the relative proportions of the metals in which their remaining stock of specie exists can operate to mitigate the evil." The matter, however, admits of explanation. The stock of specie shown in the last monthly return of the Bank of France was £17,400,000, against a note of £30,300,000, and these figures in themselves present nothing to excite panic. The fact that the proportion of gold to notes had been rapidly becoming less favorable, demanded prompt attention, but the advance of one per cent. adopted in the rate of discount might have been expected, if gradually followed up by further measures of the same kind, to prove a sufficient corrective. To the surprise of every one, the Bank of France commenced offering a premium for gold, and at the same time entered into onerous terms for obtaining large amounts from this side. A run was stimulated, and all persons were led to infer that the directors saw some imminent

peril in the position of the bank. It then transpired that the eagerness on their part to get gold was not from apprehension that their entire stock of specie might be drawn to a fatally low point, but from the fact that this stock consists mainly of silver, and that hence they were rapidly approaching a condition which would compel them to meet all demands in that metal. This announcement, however, seemed in no way to solve the prevailing perplexities. According to the law of France, where a double standard prevails, they are at liberty to discharge their obligation either in gold or silver, as they may deem expedient, and it was hard to see why they should object to pay in silver upon the exhaustion of their gold, or why, supposing the silver to be of a value beyond its denomination in coin, they should not sell it for gold in the open market, and realize the profit of this difference. The answers are rational. In the first place, if the bank had commenced paying away silver, the common knowledge that this metal has for several years past borne a high premium and been difficult to obtain, would have led to a general rush for it; in the next place, if they had suddenly thrown upon the market a quantity sufficient to provide for their gold requirements, the operation would have been attended with difficulty, and must have been effected at a proportionate sacrifice. Out of these considerations has arisen the resolution to make the application to the Bank of England for a loan of gold against silver, which has just been acceded to, the Bank of England, under their charter, are empowered to hold one-fifth of their specie reserve in that metal, and could now legally take nearly £3,000,000. The arrangement for £2,000,000 is, therefore, amply within the limit. For several years—indeed, since the last importation of rupees from India—they have not held an ounce of silver in their issue department, the depreciation in the relative value of gold consequent upon the Californian and Australian influx, having effectually precluded any such circumstance. It merely remains to remark that a principal reason for believing that the arrangement now concluded will terminate the disturbance in the markets both of Paris and London, consists in the fact that, as there will be no further withdrawals of our bullion on account of the Bank of France, (beyond the simple exchange of one description for another,) the Bank of England will not be under the necessity of advancing its rate of discount, or maintaining it at a point above that of the Bank of France, such as to interfere with the efforts of that establishment to bring about a wholesome contraction. It is not improbable, therefore, that an early lowering of our rate may be witnessed; and this event would tend materially to allay the vague uneasiness in Paris, while the maintenance by the Bank of France of their rate of 4½ per cent, and its advance, if necessary, to 5 per cent, will probably be effectual to prevent any further very important efflux from that country. Of course, the moral still remains, that much of the drain which has now continued with few intermissions for sixteen months is to be regarded as the inevitable result of the scale of national expenditure, but, as has already been observed, that result has not yet assumed proportions beyond remedy. Meanwhile, it is satisfactory to see that the present crisis seems likely to be adjusted by a very simple act of common courtesy on the part of the Bank of England, such as the Bank of France would, as experience has shown, have been prompt on their part to accord to us.

The arrangement above described is to be for any period that may suit the Bank of France.

CUBAN FINANCES.

The total receipts into the royal treasury of the Island for the eight months of the present year add up, according to the official report, \$13,049,081 53½, against \$14,081,191 71½ the same months last year, which is a decrease of \$32,116 15. Of this amount, \$8,440,775 57½ are what are called maritime rents, and \$4,608,305 99½ what are called land rents. The receipts, month by month, as compared with last year, were as follows:—

	Maritime rents.		Land rents.	
	1869.	1860.	1869.	1860.
January.....	\$803,689 09½	\$861,387 81	\$589,551 82	\$555,599 08½
February	1,010,002 78	1,068,784 70	508,810 33½	481,991 52½
March.....	1,156,009 94	1,263,618 84	763,955 83½	679,770 11
April.....	1,061,933 93½	1,169,844 49½	663,396 68½	501,309 23½
May.....	1,215,069 00½	1,181,518 38½	539,991 54½	615,232 25½
June.....	1,059,023 72½	985,888 80½	619,413 62½	596,971 84½
July.....	1,107,192 43½	1,130,073 86½	511,259 05½	522,982 56½
August.....	846,118 57½	829,709 17½	625,823 33	654,469 15½
Total.....	\$8,256,989 48½	\$8,440,775 57½	\$4,882,202 23½	\$4,608,305 99½

SILVER AT THE UNITED STATES MINT.

The Director of the Mint, with the approval of the Secretary of the Treasury of the United States, has arranged with the Adams Express Company for the transportation, free of cost to the shipper, of the old copper cents in sums of \$20 and upward to the Mint, and of the new cents in return to all points in the Atlantic States, accessible by railroad and steamboat, and all other places which can be reached by conveyance not incurring unreasonable expense. Adams Express Company act as agents for forwarding the coins to and exchanging them at the Mint. Each parcel of silver should be securely enveloped and fastened. Enclose the memorandum of the amount and denominations in the package. Put the whole in good transportable order. Seal, mark the value on the outside, direct to the United States Mint, Philadelphia, enclosing your instructions in the package. Silver and copper must not be mingled in the same parcel.

United States Mint Circulars in relation to the purchase of silver bullion for coinage, and in reference to the copper cent, can be had by applying to the money department of the Adams Express Company, in this city.

MINT OF THE UNITED STATES, PHILADELPHIA, October, 1860.

The following are the regulations of the Mint in relation to the purchase of silver bullion for coinage, and the receipt of copper cents of the United States (O. S.) in exchange for cents of the new issues.

The Mint price of silver is one dollar and twenty-one cents per ounce of standard fineness. The silver offered for purchase will be weighed, melted and assayed as usual, and the standard weight determined therefrom in ounces troy to the one-hundredth part of an ounce. The receipt given at the first weighing must be presented by the seller, or his order.

This direction will apply to the several Minting establishments that are authorized to purchase silver for coinage, namely, the Mint at Philadelphia, the Assay Office at New York, the Branch Mint at New Orleans, and the Branch Mint at San Francisco.

The silver purchased for coinage will be paid for in the silver coins of the United States.

For the information of the public it may be stated, that according to the

above rate of purchase, the yield of various classes of coin or bullion will be about as follows :—

Five franc pieces, 96.8 cents each.

Mexican and South American dollars, 105 cents each.

Old Spanish dollars, 103.8 cents each.

Revolutionary or "hammered" dollars (often mistaken for the true Spanish dollars), 100 cents each.

Half dollars of the U. S. coin before 1837, 51.6 cents each.

The same since 1837 to the last change of standard in 1853, 51.9 cents each.

Spanish quarters, 23.2 cents each.

Spanish eighths, 10.8 cents each.

Spanish sixteenths, 5 cents each.

Mexican quarters, 25 cents each.

Quarters dollars are proportionally less productive of premium, while dimes and half dimes, coined before 1837, have lost rather more by wear, on an average, than the premium would make up; those coined since 1837 to 1853 will average a premium of $3\frac{1}{4}$ per cent each on their nominal value.

German crowns, 111.2 cents each.

Swedish, Danish, and Norwegian crowns, 110 cents each.

Old French crowns, 112.5 cents each.

German florins, 41.2 cents each.

Prussian and Hanoverian thalers, 71 cents each.

Fine silver, 134.4 cents per ounce.

American plate, usual manufacture, 119 a 121 cents per ounce.

Genuine British plate, 124.3 cents per ounce.

The old copper cents of the United States are received at their nominal values, in even sums of five dollars and upward, and cents of new issues given in exchange therefor; but no fractional part of that amount will be taken.

The reasonable expenses of transportation of the copper cents to the Mint, and the new cents in return, in sums of twenty dollars and upward, to any point accessible by railroad or steamboat, will be paid by the Mint.

JAMES ROSS SNOWDEN, Director of the Mint.

REAL AND PERSONAL PROPERTY IN INDIANA.

The following statement contains the aggregates of the assessment of real and personal property in Indiana, for the year 1860, which we take from the report of the Auditor of State :—

Number of acres.....	21,867,641
Value of lands without improvements.....	\$219,661,783
Value of improvements.....	55,491,249
Value of lands and improvements.....	275,153,032
Value of town lots and improvements.....	47,473,826
Total value of railroad assessment.....	6,619,842
Other corporation stock.....	1,819,246
Other personal property.....	122,944,432
Total valuation.....	456,011,378
Number of polls.....	203,098

On the above stated amount of property and number of polls, there are levied the following amounts of taxes :—

State tax.....	\$659,159 12
County tax.....	1,192,437 95
School tax.....	536,044 86
Road tax.....	338,347 81
Township tax.....	141,641 21
Sinking fund tax.....	88,734 88
Railroad tax.....	41,839 92
Other corporation tax.....	607,721 99
Total amount of taxes for 1860.....	3,768,426 87
Delinquent tax.....	702,699 64
Total amount of taxes.....	4,471,126 51

STATISTICS OF TRADE AND COMMERCE.

FOOD AND FOREIGN MARKETS.

We present, from an official report to Congress, a tabular statement of the foreign export of breadstuffs and provisions for each fiscal year since July 1, 1841, to which we add the values of tobacco, cotton, and rice for the same period of twenty years :—

	Breadstuffs and provisions.	Tobacco.	Rice.	Cotton.
1841.....	\$17,196,102	\$12,576,708	\$2,010,107	\$54,380,341
1842.....	16,902,876	9,540,755	1,907,387	47,593,464
1843.....	11,204,123	4,650,979	1,625,726	49,119,806
1844.....	17,970,135	8,397,255	2,182,468	54,063,501
1845.....	16,743,421	7,469,819	2,160,456	51,739,643
1846.....	27,701,921	8,478,270	2,564,991	42,767,301
1847.....	68,701,121	7,242,086	3,605,896	53,415,848
1848.....	37,472,751	7,551,122	2,531,824	61,998,294
1849.....	38,155,507	5,804,207	2,569,862	66,396,967
1850.....	26,051,973	9,951,023	2,631,557	71,984,616
1851.....	21,948,651	9,219,251	2,170,927	112,315,317
1852.....	25,857,027	10,031,233	2,470,029	87,965,732
1853.....	32,985,322	11,319,319	1,657,658	109,456,404
1854.....	65,941,323	10,016,046	2,634,127	93,597,220
1855.....	38,895,348	14,712,468	1,717,953	88,143,844
1856.....	77,187,301	12,221,843	2,390,233	128,382,351
1857.....	74,667,852	20,662,772	2,299,400	131,575,859
1858.....	50,683,285	17,009,767	1,870,578	131,386,661
1859.....	38,305,991	21,074,038	2,207,148	161,434,923
1860.....	45,271,850	15,906,547	2,567,399	191,806,555

Some idea of the relative importance of these articles may be formed from the following recapitulation for twenty years :—

Breadstuffs and provisions.....	value	\$749,843,280
Tobacco.....		223,835,553
Rice.....		45,566,224
Cotton.....		1,789,473,687

Total..... \$2,808,718,744

Twenty-eight hundred and eight millions in twenty years, of which one-fourth is breadstuffs and provisions !

The value of breadstuffs and provisions exported abroad has been greater in previous years than in the past, but in the present fiscal year ending 30th June, 1861, will probably exceed largely the value of any former year.

From the 1st of September up to the middle of January the export was as follows :—

	Flour, bbls.	Wheat, bu.	Corn, bu.
1859.....	203,997	394,397	.....
1860.....	1,116,681	12,392,412	2,697,880

This gives for the four-and-a-half months a value of \$26,000,000, against \$1,600,000 in the previous year.

In the year 1860, now closed, the market value of wheat, flour, and corn fluctuated materially. The lowest price for wheat was in December—98 cents; and the highest in October—\$1 35. For shipping flour the range was from \$4 50 to \$5 30; for corn, 58 to 80 cents. In the rates of freight to England, the fluctuations were still greater, ranging from 1s. 6d. (thirty-five cents) to 3s.

6d., or about eighty-six cents. The following table shows these fluctuations for each month in the year 1860 :—

LOWEST AND HIGHEST PRICES EACH MONTH OF 1860, OF WHEAT, FLOUR, AND CORN, AND THE FREIGHT (IN STERLING) FROM NEW YORK TO LIVERPOOL.

	Wheat.		Flour.		Corn.		St'g freight to Liverpool.	
	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.
January.....	\$1 12	\$1 26	\$5 10	\$5 55	none	none	1s. 9d.	2s. 3d.
February.....	1 15	1 25	5 10	5 50	none	none	2 0	2 3
March.....	1 18	1 30	5 25	5 55	70c.	78c.	1 9	2 3
April.....	1 17	1 35	5 25	5 65	70	85	1 9	2 3
May.....	1 17	1 33	5 15	5 70	60	80	1 10	2 6
June.....	1 18	1 35	5 15	5 65	60	68	1 6	2 0
July.....	1 14	1 33	5 15	5 60	60	66	2 3	2 6
August.....	1 15	1 33	5 15	5 80	60	68	2 3	3 6
September.....	1 14	1 33	5 30	6 20	65	70	3 6	4 0
October.....	1 14	1 35	5 40	5 70	68	72	3 0	3 8
November.....	1 05	1 32	4 50	5 65	64	72½	3 0	4 3
December.....	0 98	1 28	4 50	5 65	58	72	2 9	3 6

In the year 1858 the English markets were supplied with 14½ per cent only of wheat from the United States, but in 1860 the proportion exceeded 21 per cent. Annexed is a statement of the exact proportion per cent contributed from the various countries of the world to Great Britain during the last three years. In estimating the effect of the several variations, the great difference in present prices compared with those of 1858 and 1859 must be particularly borne in mind :—

WHEAT—TOTAL IMPORTATION INTO GREAT BRITAIN.

	1858.	1859.	1860.
Quarters.....	3,988,528	3,729,316	5,015,236
	Per cent.	Per cent.	Per cent.
Russia.....	13	21½	24
Prussia.....	15½	18½	21½
Denmark.....	7	7	4½
Mecklenburg.....	2½	3	3½
Hanse Towns.....	4	1½	3
France.....	19	29½	9
Turkey, Wallachia, and Moldavia.....	5	1½	3
Egypt.....	10½	10	3½
United States.....	14½	½	21½
Other countries.....	8½	6½	6½
Total.....	100	100	100

As regards flour, the changes have been yet more remarkable, nearly the whole of the English supply last year having been obtained from France, while, on the present occasion, that country figures for a smaller total than the United States, whence, in 1859, the arrivals were insignificant :—

FLOUR—TOTAL IMPORTATION INTO GREAT BRITAIN.

	1858.	1859.	1860.
Hundred weight.....	3,652,725	3,180,937	4,327,639
	Per cent.	Per cent.	Per cent.
Hanse Towns.....	4	6½	5½
France.....	41½	84½	37½
United States.....	47½	4	41½
Other countries.....	7	5	16
Total.....	100	100	100

UNITED STATES COFFEE CONSUMPTION.

The annexed tables of the New York *Shipping List* gives the consumption of coffee in the United States, taken from the ports as follows, for three years :

CONSUMPTION OF THE PORTS.

	1860.	1869.	1868.
New York.....lbs.	63,523,547	74,732,632	92,690,997
New Orleans.....	47,380,325	55,288,360	64,528,420
Baltimore.....	28,257,480	35,967,870	41,890,800
Philadelphia.....	15,431,985	30,464,718	27,694,252
Boston.....	9,828,549	12,062,220	12,717,528
Other ports.....	18,108,736	15,427,050	12,233,102
Total.....	177,530,623	223,882,850	251,255,099
Total, 1860	177,530,623	177,530,623	
Decrease.....		46,352,227	

In the above statement of consumption, we have included only the direct receipts at the ports, the coastwise receipts being embraced in the calculation at the port of original entry.

Comparing the receipts and consumption for many years, the results are as follows :—

	Receipts.	Consumption.		Receipts.	Consumption.
1860..lbs.	185,779,689	177,530,623	1854....	182,473,853	179,481,083
1859....	248,527,306	223,882,850	1853....	193,112,300	175,687,790
1858....	227,656,186	251,255,099	1852....	205,542,855	204,991,595
1857....	217,871,839	172,565,934	1851....	216,043,870	181,225,700
1856....	230,913,160	218,225,490	1850....	152,580,310	134,539,730
1855....	238,214,533	218,373,287			

Included in this statement is the quantity withdrawn from our markets and forwarded inland to Canada and the British Provinces. We are unable to ascertain the exact amount, but it does not vary greatly from 2,500,000 pounds.

The consumption per head in 1860 seems to have been 5½ lbs., and in 1850, 6 lbs., showing a decline in quantity; but the value per pound of Brazil has been in the last year 13.69 cts., and in 1850, 8 cts., hence the value per head was then 48 cts. per annum, and in the past year, 75½ cts. The quantity taken for consumption in the past year has been much less than in the ten previous ones, of which the average was 7½ lbs. per head per annum. The high price evidently reduced the consumption.

SHOE TRADE OF MASSACHUSETTS.

The *Shoe and Leather Reporter* gives the annexed interesting tables of the export of shoes from Boston, remarking :—This table, as well as our weekly reports of the shipments, has been prepared with great care, but it is proper to state that the entries of the railroad clerks are sometimes so illegible that a shipment may be set down to the wrong place. In some cases, especially in shipments to distant points, the freight is consigned to intermediate places and reshipped. A few shippers by sea, also, especially to New Orleans and other Southern ports, are fond of making their entries as merchandise, instead of boots and shoes, though in the latter case we sometimes have means of discovering the nature of the goods. Through these various causes, slight errors have undoubtedly crept into the table, but in the main it will be found correct :—

SHIPMENTS OF BOOTS AND SHOES FROM BOSTON TO THE DIFFERENT STATES, OUTSIDE OF NEW ENGLAND, FOR THE YEAR 1860.

Destination.	1st quarter.	2d quarter.	3d quarter.	4th quarter.	Total.	
Alabama.....	1,194	762	1,950	710	4,616	cases
Arkansas.....	371	815	1,187	327	2,000	
California.....	14,161	11,200	6,205	11,841	43,407	
Delaware.....	118	....	....	....	118	
Florida.....	19	5	30	....	54	
Georgia.....	2,069	810	1,879	1,356	6,084	
Illinois.....	7,753	6,790	15,610	9,806	39,959	
Indiana.....	3,070	2,018	7,607	3,247	15,942	
Iowa.....	1,523	895	2,989	1,657	7,064	
Kansas.....	407	474	409	45	1,425	
Kentucky.....	10,069	2,942	14,719	2,748	30,478	
Louisiana.....	9,907	6,848	12,405	4,767	33,927	
Maryland.....	16,749	8,836	19,927	7,699	48,211	
Michigan.....	796	1,367	2,227	1,810	6,200	
Mississippi.....	1,692	229	808	117	2,846	
Minnesota.....	31	264	457	532	1,324	
Missouri.....	18,810	5,585	22,400	4,449	50,694	
New Jersey.....	5	....	....	....	5	
New York.....	62,423	31,822	60,558	27,323	182,126	
New Mexico.....	....	50	281	....	331	
North Carolina.....	67	69	120	204	457	
Ohio.....	18,262	8,667	25,795	10,395	58,020	
Pennsylvania.....	18,616	8,830	24,653	6,304	38,458	
South Carolina.....	11,947	1,680	7,734	2,855	23,016	
Tennessee.....	6,352	1,074	6,050	669	14,145	
Texas.....	758	130	907	307	2,002	
Virginia.....	2,533	1,210	5,348	2,114	11,205	
Wisconsin.....	471	538	3,225	2,869	7,103	
Uncertain.....	3	....	1,083	84	1,125	
Total.....	204,686	98,420	246,649	103,292	653,047	

SHIPMENTS OF BOOTS AND SHOES FROM BOSTON TO FOREIGN MARKETS DURING THE YEAR 1860.

Destination.	1st quar.	2d quar.	3d quar.	4th quar.	Total.
Buenos Ayrea.....	....	....	....	310	340
Cape Town, South Africa.....	....	....	56	....	56
Charlottetown, East Indies.....	....	25	14	10	49
Constantinople.....	....	....	263	....	263
Cuba.....	....	1	46	37	87
Halifax, N. S.....	207	95	86	154	602
Hamilton, C. W.....	84	41	157	72	354
Hayti.....	....	....	....	1	1
Hong Kong, China.....	....	....	....	41	41
Honolulu, S. I.....	11	....	....	....	11
London, C. W.....	124	5	11	12	152
Melbourne, Australia.....	1,080	973	822	965	3,840*
Miramichi, N. B.....	....	45	....	....	45
Monrovia.....	....	..	....	1	1
Remedios, N. G.....	....	3	....	....	3
Richebucto, N. B.....	....	13	....	....	13
St. John's, N. B.....	24	8	....	....	32
St. Thomas, W. I.....	....	10	15	8	33
Simcoe, C. W.....	....	15	....	....	15
Sidney, New South Wales.....	....	50	....	....	50
Toronto, C. W.....	448	12	90	23	613
British Provinces, (various places)....	6	30	....	84	120
Total.....	2,084	1,329	1,560	1,748	6,721

It will be seen that the table gives at a glance the shipments for each quarter to every State south and west with which a direct trade of any consequence is established. The various unfavorable influences, political, financial, and otherwise, which have of late borne upon the business with such deplorable effect, will be found recorded among the figures in characters not to be mistaken.

The number of cases shipped to domestic markets was 653,047. Comparing with previous years, the total presents 64,944 cases less than in 1859, and but 3,047 more than our computation for 1858—a year looked upon as peculiarly unfortunate in the shoe trade. The shipments by quarters for the last two years are as follows:—For 1859—first quarter, 215,336; second quarter, 136,612; third quarter, 260,329; fourth quarter, 105,714. For 1860, they were for the first quarter, 204,686; second quarter, 98,420; third quarter, 246,649; fourth quarter, 103,292; showing a loss in each respectively of 10,650; 38,192; 13,680; and 2,422.

Of domestic cities, New York received during the past year by far the greatest number of cases, amounting to 168,957, or more than one-fourth of the whole. Another fourth was thus distributed: 48,211 cases to Baltimore, 43,526 to Cincinnati, 55,698 to Philadelphia, and 43,244 to San Francisco. There were sent to St. Louis, 46,945 cases; to New Orleans, 33,685; to Chicago, 24,960; to Charleston, 23,845; to Louisville, 26,369; to Cleveland, 8,053; to Nashville, 8,040; to Norfolk, 6,208. From 3,000 to 5,000 cases were shipped to each of the following: Detroit, Memphis, Milwaukee, Savannah, and Richmond, and from 1,000 to 3,000 each to Albany, Alton, Ill., Buffalo, Burlington, Ia., Columbus, O., Dayton, O., Dubuque, Ia., Evansville, Ind., Galena, Ill., Galveston, Tex., Indianapolis, Ind., Keokuk, Ia., Lafayette, Ind., Lexington, Ky., Madison, Ind., New Albany, Ind., Paducah, Ky., Pittsburg, Pa., Rochester, N. Y., St. Josephs, Mo., and Toledo, O. Thirteen other places received from 500 to 1,000 cases each, and one hundred and eight places from 100 to 500 cases each. The remaining 259 places received from 20 to 100 cases each. The whole number of cases shipped to the Southern States was 182,634; to the Middle States, 288,913; to the Western States, 180,099, and to the Territories, 331; uncertain, 1,125.

The foreign shipments, which are comparatively of trifling importance, amounted during the last year to 6,680 cases, an increase of 1,602 over 1859; 3,840, more than one-half of them, were sent to Australia. Nearly all the remainder went to the British Provinces in North America, to Constantinople, and to Buenos Ayres, leaving a few to be scattered among the West India Islands.

Adding to all these an allowance of 25,000 cases for the New England trade, illegible entries, etc., we may estimate the whole number of sales from Boston during the year, in round numbers, at 685,000 cases, which, at an average value of \$45, would be worth \$31,000,000.

GRAIN AT CHICAGO.

From an able and complete review of the trade of Chicago for the past year, published in the *Chicago Tribune*, we copy the following tables:—

The total receipts of flour and grain during the past year, as will be seen from the tables which follow, amount to 36,504,772 bushels. The grain alone

foots up 33,004,742 bushels, which is more than double the receipts of 1859, and 10,000,000 more than was ever received in this city in any previous year of our history.

The shipments during the past year amount to 31,459,697 bushels, of which 27,890,002 bushels were of grain alone.

The following tables show the items, separately compared with the figures of former years :—

TOTAL RECEIPTS OF FLOUR AND GRAIN FOR FOUR YEARS.

	1857.	1858.	1859.	1860.
Wheat.....bushels	10,554,761	9,761,826	8,184,746	14,568,429
Corn.....bushels	7,409,130	8,260,033	5,410,003	15,487,966
Oats.....bushels	1,707,245	2,285,822	1,818,048	2,029,906
Rye.....bushels	87,911	70,081	228,179	295,436
Barley.....bushels	127,689	411,421	662,187	623,005
Total.....bushels	19,886,536	20,798,183	16,298,163	33,004,742
Flour into wheat.....bushels	1,960,870	2,624,575	8,710,060	3,500,080
Total.....bushels	21,856,206	23,422,708	20,008,223	36,504,772

SHIPMENTS OF ALL KINDS OF GRAIN FOR THE PAST FOUR YEARS.

	1857.	1858.	1859.	1860.
Wheat.....bushels	9,485,052	8,727,838	7,266,553	12,487,694
Corn.....bushels	6,814,615	7,498,212	4,127,654	13,948,172
Oats.....bushels	416,778	1,498,184	1,174,177	1,039,779
Rye.....bushels	.....	7,560	181,449	129,156
Barley.....bushels	17,993	127,008	478,162	290,211
Total.....bushels	16,734,438	17,853,761	13,178,995	27,890,002
Flour to wheat.....bushels	1,298,240	2,181,405	3,484,800	3,566,695
Total.....bushels	18,032,678	20,035,166	16,663,795	31,456,697

WOOL.

The circular of BOND & Co., of Boston, gives the comparative table of imports of wool at Boston as follows :—

	1856.	1857.	1858.	1859.	1860.
England.....lbs.	41,395	3,126,888	1,162,808	1,971,852	939,629
Buenos Ayres.....	1,883,125	3,280,011	1,643,857	3,620,167	2,775,277
Turkey.....	2,505,590	5,241,082	2,011,792	2,881,288	2,913,882
Franca.....	83,691	507,236	22,053	1,056,695	346,336
Cape of Good Hope.....	570,740	2,506,716	1,984,372	4,454,590	5,624,976
Brazil.....	82,458	5,496	.....	3,802	.....
Peru and Chili.....	2,211,467	3,045,440	3,578,446	2,883,641	2,238,192
British Provinces.....	4,619	2,191	13,253	14,694	9,742
Dutch West Indies.....	.....	.....	.....	.....	1,942
Malta.....	142,722	298,023	.....	97,009	.....
Tuscany, etc.....	.....	.....	58,500	.....	.....
East Indies.....	.....	281,026	64,213	771,790	241,429
Austria.....	.....	107,771	.....	.....	.....
Spain.....	.....	74,451	.....	378,078	893,751
Russia.....	.....	356,034	.....	68,539	.....
Sandwich Islands.....	.....	2,440	9,805	.....	.....
Northern Africa.....	.....	131,281	.....	387	.....
Sundries.....	.....	.....	1,751	29,851	13,467
Total.....	8,425,807	17,948,831	10,550,849	18,177,378	15,298,394

PRICES OF BILLINGS' SUPER FULLED, JANUARY 1.

1856.....	42½c.	1858.....	32½c.	1860.....	50c.
1857.....	50	1859.....	50	1861.....	40

STOCK OF DOMESTIC WOOL.

		Fleeces	Fulled.
In Boston.....	.....lbs.	2,000,000	700,000
In United States.....		7,000,000	2,000,000

The demand for woollen goods being brisk, the wool trade continued active until checked by the unexpected scarcity of money, caused by political troubles, early in November; since then it has remained stagnant until the close of the year. During the present month there have been considerable sales at about our quotations, some forced sales at even lower rates.

COTTON IMPORT, EXPORT, AND CONSUMPTION IN GREAT BRITAIN.

	1860.	1859.	1858.
Imported from United States.....bales	2,582,000	2,098,000	1,863,000
" Brazil	102,000	118,000	106,000
" West Indies.....	10,000	7,000	7,000
" Egypt	110,000	100,000	106,000
" East Indies	568,000	511,000	861,000
Total import.....	3,867,000	2,829,000	2,448,000
Export.....	609,000	437,000	348,000
Stock, December 31	595,000	470,000	372,000
Consumed during the year	2,682,000	2,294,000	2,174,000
Average weekly consumption	40,615	44,115	41,829
Price for New Orleans middling, June 30 ..	6½d.	7d.	7d.
" " " Dec. 31...	7½d.	6½d.	7d.
Taken by speculators.....	536,900	370,000	547,000
United States crop.....	4,676,000	3,851,000	3,114,000
Consumed in United States.....	810,000	700,000	496,000
Average weight of bales.....lbs.	428	428	419
	1860.	1859.	1858.
Stock, Dec. 31.....	383,000	301,000	265,000
" " all sorts.....	545,000	442,000	349,000
Import	3,172,000	2,709,900	2,335,000
Export	581,000	883,000	288,000
Consumption	2,587,000	2,227,000	2,181,000
Expected from United States.	150,000	250,000	105,000
" East Indies....	65,000	85,000	45,000

MOLASSES.

The consumption of molasses in the United States has been, according to the tables in the *New York Shipping List*, for several years as follows:—

TOTAL CONSUMPTION IN THE UNITED STATES.

	Foreign & domes.	Foreign.		Foreign & domes.	Foreign.
1860. .galls.	47,318,817	28,724,205	1854. .galls.	56,493,019	24,437,019
1859.....	54,260,970	28,293,210	1853.....	55,536,821	28,576,821
1858.....	45,169,164	24,795,374	1852.....	48,257,511	29,417,511
1857.....	28,508,784	23,266,404	1851.....	43,948,018	33,288,278
1856.....	39,608,878	23,014,878	1850.....	37,019,249	24,806,949
1855.....	47,266,085	23,538,423			

The statistics presented above show that the total receipts of foreign molasses into the United States for the year ending December 31, 1860, were 31,126,015 gallons, against total receipts in 1859 of 28,960,175 gallons, and the consumption of foreign descriptions was 28,724,205 gallons, against a consumption in 1859 of 28,293,210 gallons, while the total consumption of foreign and domestic in 1860 was 47,318,877 gallons, against a total consumption in 1859 of 54,260,070 gallons, showing an increase in the consumption of foreign of 430,995 gallons, or over 1½ per cent, but a decrease in the consumption of all kinds of 6,942,093 gallons, or nearly 13 per cent.

The receipts and consumption of foreign in 1860 were much larger than before in several years, owing to the crop of domestic of 1859-60 being considered below an average yield. The crop of Louisiana, etc., now coming forward, it is estimated, will not be any larger than the previous season, and very probably will be considerably less. Of the receipts into the country the past year, about 60,000 hhd. have been taken by sugar refiners, 50,000 by distillers, and the remainder has been distributed among the trade, exporters, etc.

THE STEAM MARINE OF BOSTON.

The report of the Boston Board of Trade refers to the increase of Steam coast navigation made by the merchants of that city. The Merchants' and Miners' Transportation Company have four first-class side-wheel steamships, from ten to twelve hundred tons each, constantly employed. Three, with little variations, have plied between Boston, Norfolk and Baltimore, and the other between Boston, Baltimore and Savannah. These lines have materially increased the trade between us and the Southern ports above mentioned. And as the Company run their ships without insurance, and have escaped serious accidents, their business, under prudent management, has been moderately profitable.

During the past year, the proprietors of the line between Boston and Philadelphia have added the new steamer Cambridge, of 850 tons, which, with the Kensington and Phineas Sprague, of about 1,000 tons each, afford in the aggregate a freighting capacity of 20,000 barrels. One of these vessels leaves port every five days. The efficiency of this line for more than eight years, together with its valuable Southern and Western connections, *via* the Pennsylvania Railroad, by steamer to Richmond, and thence by Southern railroads, have justly commended it to public favor.

Within a few months, the new steamer Pembroke, of about 240 tons, has been added to the means of communication with the eastern part of Maine. This vessel is intended to ply regularly between Boston, Eastport and Pembroke, in winter as well as in summer. Her steam power is ten miles the hour, and with the help of sails she performs a passage in twenty-five hours. She is very burthensome—carrying more than her tonnage—has proved herself a superior sea-boat, and, in the words of a large owner, “will run more economically as regards coal than any steamer now known.” She belongs to an incorporated company, but seven-eighths of the stock is held in that city, and principally by WILLIAM M. COFFIN & Co.

The house of ALPHENS HARDY & Co., are the pioneers here, and, as far as we are informed, in the United States, in the introduction of steam in the Mediter-

reanean fruit trade. Their clipper, *Young Rover*, of 400 tons, is a very superior vessel. She is completely rigged as a bark, with auxiliary steam power, which will be used in passing the Straits of Gibraltar, in head winds or calms. Good judges pronounce that she is "of a very handsome model," of great strength, and "finished in the first style of workmanship."

The Southern Steamship Company originated in this Board last year; and the iron screw steamers *Massachusetts* and *South Carolina*, of about 1,150 tons each, were placed on the route between Boston and Charleston, in June and July. The line is appreciated by the business men of both cities; both vessels have proved efficient, and have performed their trips with singular regularity.

On the first of August, 1859, the Government of the Board appointed a committee to inquire into the expediency of establishing a line to New Orleans; and on the 30th of May, 1860, the friends of the enterprise organized by the name of the Union Steamship Company. The capital stock was 400,000 dollars, and the right of navigation was limited to Boston, New Orleans, and the ports on the Gulf of Mexico; but, by an additional act, the capital has been increased 300,000 dollars, and the ports of Cuba have been included in the route. The Building Committee of the Company invited proposals for the construction of two first-class iron screw steamships, of about 2,000 tons each; one to be completed in September, and the other in November, of the present year.

LUMBER TRADE OF ALBANY FOR 1860.

A large amount of common pine was received from Michigan and Wisconsin, when usually only the better qualities are sent this way. The receipts for the year have been about ten millions of feet of boards and scantling more than in the previous year, and the total amount, 301,022,600 feet, is a larger quantity than has been received at any other market.

The following table exhibits the receipts at Albany during the years named:—

	Boards and scantling, ft.	Shingles, M.	Timber, C. ft.	Staves, lbs.
1850	216,791,890	34,226	28,882	150,515,280
1851	260,288,620	34,186	110,200	115,087,290
1852	317,135,620	31,686	291,714	107,961,289
1853	393,726,073	27,586	19,916	118,666,750
1854	311,571,151	24,008	28,909	135,806,091
1855	245,921,652	57,210	24,104	140,255,285
1856	228,345,545	36,899	14,538	102,543,492
1857	180,097,629	71,004	85,104	153,264,629
1858	267,406,411	31,823	119,497	135,011,817
1859	291,771,762	48,756	70,381	114,570,503
1860	301,022,600	41,222	46,888	148,735,369

VALUE.

	Boards & scantling.	Shingles.	Timber.	Staves.
1850	\$3,251,878	\$119,791	\$4,325	\$677,319
1851	4,119,568	121,524	19,010	546,655
1852	5,496,960	110,726	52,509	567,418
1853	6,299,617	99,585	3,386	569,600
1854	4,985,139	86,891	6,649	611,126
1855	4,426,589	228,840	4,854	631,149
1856	3,673,529	129,147	2,616	461,468
1857	2,881,560	248,515	15,218	689,691
1858	4,412,205	111,383	20,314	540,047
1859	4,887,177	170,646	11,965	458,282
1860	5,042,128	144,277	7,971	594,942

CHICAGO AND ITS EXPORTS.

The Chicago Tribune publishes a tabular statement of the exports of that city in flour, grain, and provisions, and other leading country products, during 1860. We append the table :—

	Amount.	Rate.	Value.
Flour.....bbls.	713,339	\$4 50	\$3,210,025 50
Wheat.....bush.	12,478,684	87	10,864,285 08
Corn.....	13,743,172	45	6,184,427 40
Oats.....	1,089,779	26	270,341 54
Rye.....	129,156	64	82,659 84
Barley.....	290,211	52	150,909 72
Seeds.....	117,538	2 80	330,545 40
Broom Corn.....tons	2,685	85 00	219,725 00
Highwines.....bbls.	57,617	7 25	417,723 25
Alcohol.....	8,883	16 38	63,703 54
Live hogs.....No.	133,612	12 00	1,603,344 00
Dressed hogs.....	22,672	12 00	272,084 00
Beef cattle.....	104,122	30 00	3,123,660 00
Pork.....	80,095	17 00	1,361,676 00
Beef.....	84,414	9 00	579,726 00
Cut meats.....lbs.	19,074,377	7	1,335,206 39
Provisions (not classified)..bbls.	3,025	18 00	26,325 00
Lard.....lbs.	9,150,899	11	1,006,598 89
Tallow.....	2,858,944	9½	295,424 21
Butter.....	1,697,311	12	203,677 32
Hides.....	11,609,345	10	1,160,934 50
Wool.....	783,755	40	303,502 00
Mill stuffs.....tons	906	10 00	9,060 00
Lead.....lbs.	12,114,268	5	605,708 40
Hay.....tons	1,312	10 00	13,120 00
Eggs.....bbls.	4,750	5 75	28,312 50
Poultry, game.....lbs.	94,844	10	9,484 40
Total value in 1860.....			\$33,737,489 88
Total value in 1859.....			24,280,890 47
Total value in 1858.....			19,928,495 83

The same paper states that a considerable export trade, under the general head of "merchandise," is not included in the foregoing exhibit. The excessively high rates of freight, also, are said to have reduced the aggregate about one sixth.

EXPORTS OF FLOUR AND GRAIN FROM LAKE MICHIGAN IN 1860.

The following table shows the total shipments of flour and grain from Michigan ports during the year 1860 :—

TOTAL EXPORTS OF FLOUR AND GRAIN FROM LAKE MICHIGAN IN 1860.

	Flour.	Wheat.	Corn.
Chicago.....bush.	713,339	12,487,684	13,943,172
Milwaukee.....	285,712	8,161,982	114,444
St. Joseph.....	.....	25,000	.....
Waukegan.....	.....	170,000	.....
Kenosha.....	1,460	279,203	.....
Racine.....	10,871	852,951	.....
Port Washington.....	6,765	31,410	.....
Sheboygan.....	27,222	78,762	.....
Manitowoc.....	5,000	30,000	.....
Green Bay.....	36,187	109,941	.....
Total.....	1,033,146	22,227,923	14,057,616

The figures for Milwaukee are the receipts of grain and flour.

A YEAR'S TRADE OF GREAT BRITAIN.

The annual statement of our foreign and colonial trade and of navigation shows that in the year 1859 the American continent, with Cuba and the West Indies, took £40,000,000 of our produce and manufactures; and India, Singapore, and Ceylon, with Australia and China, took £37,000,000 more. To these great countries we disposed of nearly £30,000,000 of our cotton goods and yarn out of the whole £48,000,000 exported. The United States took £4,600,000 of our cotton goods, £4,476,000 of our woollens, £2,160,000 of linens, and £1,568,000 of apparel and haberdashery; India, including Singapore, took £14,290,000 of cotton goods and yarn, China only £3,190,000, and £700,000 of woollens; Australia, £1,870,000 of apparel and haberdashery, £790,000 of cottons, and £765,000 of woollens. For our iron we find our principal market in the United States (£3,000,000), and also for our tin (plates) and our hardwares (above £1,000,000 of each); for our leather and saddlery in Australia (£1,000,000); for our agricultural implements in Australia and in Russia; for beer in India (£777,378) and Australia (£660,358); for butter in Australia (£342,914); for earthenware in the United States (£600,000). The exports of our produce to Australia, £4,000,000 in 1852, were £11,000,000 in 1859, and those to India have doubled since 1855; to the United States they were not £12,000,000 in 1849, they were above £22,000,000 in 1859; to China, £1,537,000 in 1849, £4,457,000 in 1859. To New Zealand we sent £632,907 worth of our produce in 1859, not far from double what we sent only three years before. Our exports to the whole world made no progress in the year 1859. In most European countries the demand for our produce was slack. France took less upon the whole than in the previous year, though her demand for some articles increased. She took no less than 1,391,000 tons of coal, and £493,083 worth of copper. There was a considerable increase, however, in our trade with Sweden, Norway, and Denmark; and Russia took more of our produce by nearly £1,000,000, raising her demand for machinery to £1,000,000, and for iron to £1,200,000. Our entire imports for 1859 (£179,182,355) were not far from £15,000,000 above those of the previous year, and our exports (our own produce £130,411,529, foreign and colonial produce, £25,281,446—in all, £155,692,975) were £16,000,000, above those of the previous year; and it must be borne in mind that the returns of the value of our imports include freight, the exports do not. In conducting this trade 26,520 visits were paid to our ports by British vessels, and 22,351 by foreign. The totals require such figures to express them as were never until now employed to set forth a year's trade of a nation. The world beyond the seas, civilized and uncivilized, sent to our shores on an average every day merchandise of the value of nearly £500,000, and to bring it to us nearly 1,000 ships came into our ports every week. Our exports of produce and manufactures of the United Kingdom in the short space of eight years, 1852–59, have exceeded in value the capital of the national debt. In ten years they have doubled; in 1849 they were £64,000,000, in 1859 they were £130,000,000. The enormous progress of some of our colonies and possessions of late years has more than restored the proportions sent to foreign countries and to British possessions to what they were twenty years ago—two-thirds and one-third; in 1840 foreign countries took £34,000,000, and British possessions £17,000,000; and in 1859 foreign countries took £84,000,000, and British possessions £46,000,000. The exports of our produce in 1859 amounted to about £4 10s. per individual inhabitant of the kingdom; twenty years ago they were not £2, and ten years ago they were not £3.—*London Times*.

LUMBER SURVEY AT BANGOR.

The amount of lumber surveyed at Bangor the present year, to December 1, was 200,391,526, exceeding that for the same time last year by 24,000,000 feet.

NAUTICAL INTELLIGENCE.

AMERICAN NAVAL ARCHITECTURE.

The iron steamship "Wm. G. Hewes," says the *Scientific American*, is one of the largest iron steamships ever built in this country. She was launched on the 15th of December, in the presence of 5,000 people. Her hull was built by Messrs. HARLAN, HOLLINGSWORTH & Co., of Wilmington, Delaware. Her machinery was constructed by the Morgan Iron Works, of New York city. The route of her intended service is from New Orleans to Galveston. For strength and beauty of model, this steamer cannot be surpassed. We append full and correct particulars of her hull and machinery:—

Length on deck, 239 feet 4 inches; length at load line, 239 feet; breadth of beam (molded,) 33 feet; depth of hold, 10 feet; depth of hold to spar deck, 18 feet; draft of water at load line, 9 feet: area of immersed section at the above draft, 270 square feet; displacement at load line, 1,253 tons; tonnage, 1,477.45 tons.

Her frame is of wrought iron bars, 4 inches by 1 inch and 4 inches by $\frac{3}{4}$ of an inch in thickness, which are fastened with keepers $3\frac{1}{4}$ inches by $\frac{3}{4}$ of an inch thick, every 12 inches, together with rivets $\frac{3}{4}$ of an inch in diameter. Distance of frame apart from centers, 16 inches; they are molded 4 inches and sided 1 inch. Number of strakes of plate, from keel to gunwale, 16; thickness of plates, one-half to eleven-sixteenths of an inch. There are 14 cross floors, shaped T; depth of these, 18 inches; thickness, nine-sixteenths and one-half of an inch, forming belts with angle iron on top, six of them continuing up to guard deck clamp, and the balance to main deck lodger. Shape of keel, U; constructed of double plates, $\frac{3}{4}$ and $\frac{1}{2}$ of an inch in thickness; depth of same, 6 inches. There are 10 fore-and-aft keelsons, 18 inches high and shaped, T; these are capped with angle iron, continuing from end to end.

The Wm. G. Hewes is fitted with one vertical beam condensing engine; number of cylinders 1; diameter of same, 50 inches; length of stroke of piston, 11 feet; length of engine room, 76 feet; diameter of water wheels over boards, 30 feet; length of wheel blades, 7 feet 6 inches; width of blades, 7 feet 6 inches; depth of blades, 1 foot 8 inches; number, 26; material, iron; dip of wheels at load line, 6 feet.

She is also supplied with 1 return tubular boiler, made of steel plates, which is the only one of any size ever constructed in this country. Length of boiler, 21 feet; breadth, 17 feet; height, exclusive of steam chimney, 9 feet; location, in hold, forward of engine; it has a water bottom. Number of furnaces, 4; breadth of same, 3 feet 6 inches; length of grate bars, 6 feet 8 inches; number of tubes, above, in boiler, 92; number of flues below, 8; internal diameter of tubes above, 5 inches; internal diameter of flues below, 1 foot 7 inches; length of tubes above, 15 feet; length of flues below, 11 feet 4 inches. Diameter of smoke pipe, 68 inches; height, above grates, 50 feet. The boiler possesses a grate surface of 93 square feet, and a heating surface of 2,600 square feet; consumption of coal, per hour, 1,680 pounds; maximum pressure of steam, 30 pounds, cut-off at one-half stroke; maximum revolutions at this pressure, 18; weight of engines, 190,000 pounds; weight of boiler, with water, 102,690 pounds.

In addition to these essential features, the following deserve attention:—Bunkers are of wood and iron; the vessel is fitted with three anchors, weight, respectively, 2,000, 1,300, and 400 pounds; water ways are of wood; she has three bulkheads, iron braced with angle iron; the water wheels have gunwale bearings; she has one independent steam fire and bilge pump, two bilge pumps, two fire pumps, one bilge injection, and five bottom valves or cocks, arranged as

follows :—Two for fire pumps, two for injection pump, and one for steam pump. Ample protection against communication from fire has been made, in the shape of iron, tin, &c.

This steamer is named in honor of the President of the New Orleans, Ohio, and Great Western Railroad Company, of New Orleans; she will be commanded by Captain JAMES LAWLESS, formerly of the steamship *Orizaba*.

THE BAROMETER AND THE WEATHER.

Since the invention of the barometer it has excited the attention of so many scientific men, and so many of their remarks are extant, that it may seem waste of time to offer anything further regarding its properties or utility. If, however, the little we can find room for, be found useful even to one person in command of a ship, the purpose for which we write will be accomplished. If there is anything in nature that will assist us in studying the barometer, it is the approach of daylight; yet it does not appear to have come under the notice of many. The various philosophical works we have read are equally silent on this subject. In a long chapter on twilight, in an astronomical work, by no less a person than *HERSCHEL*, we sought, with a fruitless result, for some information on this subject. The only writer we know of that appears to have had his attention arrested, is *FITZROY*, who tells us that when the first streaks of light appear close to the horizon, and the sun's rising is preceded by a glow of faint red, not extending far, a fine day succeeds, whether the sky is overcast or clear; but if there is much red not only near the sun, but visible on clouds near the zenith, wind, if not rain, is sure to follow. This is the sum of all we have read upon the matter, and we think it will not be improper to extend it.

Whenever the coming in of the morning can be observed, if light first appear below the altitude of six degrees, very fine weather may be depended on, at least until sunset. If any clouds be in the direction of sunrise, they will be in small fragment of cumulus, in figures of islands, castles, churches, &c., slowly changing their shape, and nearly stationary. Sometimes, however, the largest cumulus prevails, resembling large broken stacks of wool; if there be an overcast aloft, it will be of thin light stuff, that generally retires or disappears soon after sunrise, leaving a clear expanse; stars in and near the zenith will remain visible long after the observer loses sight of those below the altitude of fifteen or twenty degrees. Now in this appearance, consult the barometer—it will stand high. Let the wind be blowing in whatever direction it may, land, ships, and all objects will be seen at an immense distance. If the observer be within the tropics, he will observe that the cirro-cumulus in the zenith will slowly change its form to that of branches of cirro-stratus, the mackerel sky, and again rechanging it may be hours in this manner. Its motion, if any, will be in a contrary direction to the wind generally. When the day dawns, at an altitude of twenty degrees or upwards, large black clouds, shaded with red as the sun rises, or if smoky or bronzed, wind and rain will follow before the next sunrise—and you will have a sinking barometer. If the observer be in the Southern hemisphere, with such appearances, the wind be northerly, or N. N. E., but most in the eastern board; in such case the barometer may be rising. If near land, it will be affected in the following manner :—In the Southern Ocean, about New Zealand, from the North Cape to the Bay of Plenty, N. to N. E., from Bay of

Plenty to Cook's Straits, E. N. E. to E. S. E ; through the straits, S. E., Cook's Straits to Faveaux Straits, S. E., which may be expected every new and full moon in summer in the Southern Ocean, though not all times of long duration. When day breaks above twenty degrees strong breezes may be looked for or it will be blowing and the glass low, or falling. If mackerel sky prevail overhead, with long horizontal lines of cirro-stratus above the altitude of day-break, their edges being hard and well defined, an increasing breeze will terminate the day ; but if the horizontal lines are below the altitude of dawn, their edges will be less hard and defined, and an increase of wind seldom follow, though the glass may be low. Always rest assured, that the higher the dawn appears the stronger the gale ; and, with sufficient clearness of clouds, the stars in the zenith will be lost sight of before those at a lower altitude. However strange this may appear, many years of constant, careful observation has established it to be a fact, and rendered these signs familiar to us. If no dawn can be observed, as in cloudy weather, the horizon being everywhere closed in with dense masses of black, dirty looking gray, and black cumulo-stratus, or more properly, compact bodies of nimbus, the gale is approaching, and the barometer is low or falling at the rate of 1-10th per hour—a good barometer giving six hours' notice. Some men are quite offended with their barometer because the gale follows immediately on its descent. Indications of hurricanes or storms may be observed by the first show of light appearing directly overhead ; and though there may appear a clear expanse at sunrise, yet stars of even the second magnitude will rarely be visible to the naked eye during the entire night previous to the morning of the day of a hurricane ; at all events, they will disappear soon after midnight, and stars of the first magnitude that are visible will be ill-defined, because it is evident they will be seen through a thick, dark atmosphere. although it may be cloudless. If it be perfectly clear to the eastward, the sun may rise clear (of clouds) but not beautiful. He will rise with an angry aspect, and of a pale, brassy, or fiery brightness, with an aspect denoting, in accordance with the first coming of light, all that is to follow ; and these forewarnings of nature are as sure and simple on the occasions as her operations are dreadful and destructive to those who are ignorant of or disregard them.

There is no instrument of more real value to the educated mariner and to the mercantile world than a good barometer, when properly understood. We have heard men speak lightly of this valuable instrument, and remark that the qualities of barometers varied so much that no two instruments registered alike. This is so in some cases. We ourselves have had two on board the same ship, which we shall call No. 1 and No. 2. We always observed that No. 1 and No. 2 differed in opinion, unless in a long continuance of fine weather. No. 1 rose sooner after a gale than No. 2, and in depression was lower, and it rose slower ; and in the moderating of a gale of four or six hours—what may be termed a lull—No. 2 would remain unmoved, whereas No. 1 would run up a tenth or more. The descent of No. 2 was generally two-tenths lower, and four or six hours sooner than No. 1 ; and this was invariably the case, whether at sea or in port. In point of value, No. 1 cost more at the makers than No. 2, as it was by far the most showy instrument, but in intrinsic value to the mariner, ship-owner, and underwriter, No. 2 was worth a ship load of No. 1.

JOURNAL OF INSURANCE.

CAPITAL OF PENNSYLVANIA INSURANCE COMPANIES.

The amount of tax paid on \$1,000 capital by each insurance company, which declares no dividend, in compliance with the law of Pennsylvania, is \$3 00; for each \$10,000 capital, \$30 00, and for each \$100,000 capital, \$300. In case a company declares a dividend of six per cent, the tax amounts to just the same as above; and in case of a company declaring a twelve per cent dividend, the tax on each \$1,000 would amount to \$6 00, and for \$10,000 it would amount to \$60 00.

STATE TAX PAID BY INSURANCE COMPANIES.

We find in the last report of the Auditor-general, under the head of "Tax of Corporations," the amount of tax paid by Philadelphia insurance companies is as follows:—

American Mutual Insurance Company	\$108 74
American Fire "	1,665 00
American Life Insurance and Trust Company.....	1,000 00
Anthracite Insurance Company	88 79
Commonwealth "	1,119 60
Columbia Mutual "	37 76
Consolidated "	1,048 07
Delaware Mutual Safety Insurance Company.. ..	1,314 37
Enterprise Insurance Company	312 30
Equitable Mutual Insurance Company.....	438 32
Fame Insurance Company.....	150 00
Farmers' Mutual Insurance Company	150 00
Fire Insurance Company of county of Philadelphia.....	775 00
Franklin Fire Insurance Company	6,000 00
Great Western Insurance and Trust Company.....	78 87
Girard Fire and Marine Insurance Company.....	842 70
Girard Life Insurance, Annuity, and Trust Company	1,200 00
Howard Fire and Marine Insurance Company	22 12
Hope Mutual Insurance Company	131 39
Insurance Company of North America.....	7,500 00
" of State of Pennsylvania.....	600 00
Jefferson Fire Insurance Company.....	285 00
Manufacturers' "	126 98
Penn Mutual Life "	501 10
Pennsylvania Fire "	3,000 00
Pennsylvania Company for Insurance on Lives and Granting Annuities	2,500 00
Phoenix Insurance Company.....	409 17
Philadelphia Fire and Life Insurance Company.....	220 20
Quaker City Insurance Company.....	60 00
Reliance Mutual "	807 29
Spring Garden "	285 96
United States Life Insurance, Annuity, and Trust Company.....	995 09
Central Insurance Company, Harrisburg.....	90 00
Citizens' "	5,400 80
Eureka "	2,975 00
Fire " of Northampton County	112 70
Miners' Life Insurance and Trust Company, of Pottsville.....	673 96
Monongahela Insurance Company, Pittsburg.....	1,575 00
Pennsylvania "	996 18
Pottsville Life Insurance and Trust Company	60 00
Pittsburg Life, Fire, and Marine Insurance Company.....	446 50
Pittsburg Insurance Company.....	2 00
Western Insurance Company, Pittsburg.....	3,375 00

MARINE LOSSES FOR 1860.

	Vessel & freight.	Cargoes.	Total.
January, 1860	\$1,223,900	\$749,950	\$1,973,850
February	1,295,000	1,114,000	2,409,000
March	1,537,450	1,894,500	3,431,950
April	783,100	1,480,700	2,263,800
May	946,300	1,243,500	2,189,800
June	613,300	859,000	1,472,300
July	749,200	1,662,000	2,411,200
August	493,900	462,400	956,300
September	976,600	959,600	1,936,200
October	1,759,000	1,013,000	2,772,000
November	1,800,100	1,416,900	3,217,000
December	1,192,750	1,300,500	2,493,250
Total	\$18,825,000	\$15,050,700	\$23,882,000

TOTAL OF EACH CLASS SEPARATELY FOR THE MONTH OF DECEMBER.

Steamers	9	\$330,000	\$50,000	\$380,000
Ships	27	590,000	1,076,500	1,666,500
Barks	18	110,250	76,300	186,550
Brigs	18	62,200	24,900	87,100
Schooners	31	100,300	72,800	173,100
Total	103	\$1,192,750	\$1,300,500	\$2,493,250

TOTAL AND PARTIAL LOSS FOR YEAR 1860.

	Number.	Amount.
Steamers	84	\$7,092,800
Ships	259	12,856,000
Barks	214	5,037,850
Brigs	167	1,637,350
Schooners	315	1,758,000
Total	1,039	\$23,882,000

LOSSES IN 1859.

	Vessel & freight.	Cargoes.	Total.
January	\$1,178,300	\$1,660,000	\$2,829,200
February	1,280,600	1,246,700	2,477,300
March	699,400	1,159,000	1,858,400
April	642,400	599,560	1,241,960
May	1,165,300	1,393,900	2,559,200
June	1,413,400	1,042,500	2,455,900
July	1,975,100	2,252,600	4,227,700
August	2,170,155	1,044,150	3,214,300
September	1,023,400	1,242,900	2,266,300
October	1,791,700	2,056,600	3,851,300
November	3,203,100	5,368,160	8,571,260
December	1,223,900	749,950	1,973,850
Total	\$17,901,150	\$19,578,420	\$37,479,570

The above figures show a very gratifying reduction in the aggregate loss during the past year, and the losses for December were considerably less than in November. The heaviest losses reported for the month of December were as follows:—The British ship Clyde, in the Calcutta trade, \$320,000. The British Merchant, with wool, from Australia for England, \$330,000. The Georgiana,

from New Orleans for Liverpool, with cotton, burnt at sea, \$285,000. The British ship Emma, with wool, from Bombay for New York, \$150,000. The steamer John P. King, burn in port, \$110,000. British ship Lord Clyde, abandoned at sea, \$32,000; and the ship British Empire, also abandoned, \$165,000.

LOSSES BY FIRE IN THE UNITED STATES.

The following additional table shows the total number of fires and amount of loss during each month, compared with those in the corresponding months in 1859 :—

Months.	1860.		1859.	
	No. of fires.	Loss.	No. of fires.	Loss.
January	25	\$1,278,000	28	\$1,478,000
February	18	907,000	15	910,000
March	38	2,172,000	13	642,000
April	23	1,802,000	15	1,828,000
May	20	1,161,000	19	1,610,000
June	9	481,000	18	1,267,000
July	30	1,608,000	10	410,000
August	12	1,273,000	17	1,502,000
September	10	771,000	19	1,822,000
October	19	825,000	23	1,809,000
November	25	2,517,000	24	2,058,000
December	22	1,804,000	12	1,182,000
Total	251	\$15,597,000	203	\$16,058,000

Add to the above the amount of property destroyed by fires in the United States, where in each instance the loss was estimated at less than \$20,000, and the aggregate would be increased to probably \$22,000,000 in 1859, and to about the same amount in 1860.

The following figures show the losses by fires, where the damage has been put down at \$20,000 and upwards, and the estimated total loss by all fires in the United States for the past seven years :—

Years.	Loss \$20,000 and upwards.	Total loss by all fires.
1854.....	\$20,578,000	\$25,500,000
1855.....	13,049,000	17,000,000
1856.....	21,159,000	27,000,000
1857.....	15,792,000	20,000,000
1858.....	11,561,000	16,000,000
1859.....	16,058,000	22,000,000
1860.....	15,597,000	22,000,000
Total in seven years.....	\$113,794,000	\$149,000,000

FIRES IN CHICAGO.

The total number of fires, including false alarms, during the past year, compared with the two previous years, is as follows :—

	Fires.	Loss.	Insurance.	Ins. del.	Net loss.
1860.....	141	\$393,465	\$509,935	\$227,920	\$165,745
1859.....	122	608,492	550,720	282,585	325,907
1858.....	82	274,181	253,013	99,053	175,101

POSTAL DEPARTMENT.

FOREIGN MAIL SERVICE.

The foreign mail service of the United States, as stated in the annual report of the Postmaster-General, is as follows :—

The aggregate amount of postage, (sea, inland, and foreign,) on United States and European mails was \$1,376,402 25, conveyed as follows, viz. :—By United States and other steamships employed by this Department, \$541,039 92; by British mail packets, of the Cunard line, \$766,418 60; and by the North German Lloyd and Hamburg lines of mail packets, \$68,943 73. Of this amount, \$830,005 55 was collected in the United States, and \$546,396 70 in the United Kingdom, France, Prussia, Bremen, Hamburg, and Belgium. Excess of collections in the United States, \$283,608 85.

The number of letters and newspapers exchanged with Europe was as follows :—Letters sent from the United States, 3,093,390; received from Europe, 3,072,979; total, 6,166,369. Newspapers sent, 2,127,870; newspapers received, 1,338,207; total, 3,466,077.

The amount of letter postages upon mails exchanged with Great Britain was \$788,431 61; with Prussia, \$285,460 20; with France, \$229,802 78; Bremen, \$35,810 21; Hamburg, \$33,133 52; and Belgium, \$3,754 93; being an increase on British mails of \$18,345 61; on French mails of \$11,032 73; on Hamburg mails of \$10,551 57; and a decrease on Prussian mails of \$3,173 43, and on Bremen mails of \$2,558 16, as compared with the previous year. (The exchange of mails with Belgium commenced on the 24th of January, 1860.) Total increased letter postages, on European mails, \$37,953 20.

The amount of postages on mails sent to Great Britain was \$376,814 03; to Prussia, \$156,785 09; to France, \$110,484 45; to Bremen, \$16,995 09; to Hamburg, \$22,871 80; and to Belgium, \$2,268 18. Total sent \$686,218 64. On mails received from Great Britain, \$411,617 58; from Prussia, \$128,684 11; from France, \$119,318 33; from Bremen, \$18,815 12; from Hamburg, \$10,261 72; and from Belgium, \$1,486 75. Total received, \$690,183 61.

The weight of closed letter mails received and sent during the year was as follows :—Prussian closed mails received, 136,845½ ounces; sent, 162,646½ ounces; total 299,491½ ounces. British and Canadian closed mails received, 50,637 ounces; sent 39,018½ ounces; total, 99,655½ ounces. British and California closed mails received, 24,442 ounces; sent, 6,279½ ounces; total, 30,721½ ounces. British and Havana closed mails received, 12,733 ounces; and British and Mexican closed mails received, 1,183 ounces.

The amount paid Great Britain for sea and territorial transit of closed mails through the United Kingdom, was \$126,049 97½, and the amount received from Great Britain on British closed mails in transit through the United States, was \$41,400 65.

Balance due Great Britain on adjustment of account for the year ended June 30, 1860.....	\$193,191 96
Balance due to France, (third and fourth quarters, 1859).....	15,367 62
Balance due to Bremen.....	17,125 57
Balance due to Hamburg.....	19,879 68
Balance due the United States on adjustment of accounts with Prussia for the fiscal year.....	48,285 37

The cost of the transatlantic mail service performed by steamships employed by this Department, under the provisions of the act of June 14, 1858, was \$375,235 04. Thirty round trips were performed by American steamships between New York, Southampton, and Havre, for the sea and United States inland postages, amounting to \$228,149 70—the average, per round trip, being \$7,604 99. Eleven round trips were performed by foreign steamships between New York and Liverpool, at the sea postage only, for the sum of \$50,093 62—averaging \$4,553 96 per round trip. Ten round trips were performed between

New York and Southampton by foreign steamships, for sea postage only, for the sum of \$37,061 45—averaging \$3,706 14 per round trip. Thirty-one round trips were also performed by the Canadian line of mail packets between Portland and Liverpool and Quebec and Liverpool, for the sea postage only, for the sum of \$59,930 27—averaging \$1,933 33 per round trip.

Total postages in mails transported by steamships between New York, New Orleans, and San Francisco, via the Isthmus of Panama, including mails for Aspinwall and Panama, (New Granada,) and Acapulco, Mexico, \$226,862 75 ; between New Orleans and San Francisco, via Isthmus of Tehuantepec, from July 1 to October 10, 1860, \$1,584 81 ; between the United States and the West India Islands, \$66,715 67 ; and between New Orleans and Vera Cruz, Mexico, \$2,019 75.

The amount paid to the different home lines of ocean steamers conveying mails to and from Havana and Matanzas, (Cuba,) and receiving as compensation the United States postages, sea and inland, was \$50,651 68, and for transporting mails by steamship between New Orleans and Vera Cruz, Mexico, seven round trips, \$1,911 15.

DEAD-LETTERS.

The following is an enactment of Congress of the year 1860 :—

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That when any person shall indorse on any letter his or her name, and place of residence, as writer thereof, the same, after remaining uncalled for at the office to which it is directed, thirty days, or the time the writer may direct, shall be returned, by mail, to the said writer, and no such letter shall be advertised, nor shall the same be treated as dead-letters, until so returned to the Post-office of the writer, and there remain uncalled for one quarter.

This act was intended to obviate the losses, delays, and inconveniences arising from the previous practice of sending to the Dead-letter Office at Washington, all letters uncalled for at the end of a specific period—say three or six months.

But we fear the obvious intention of Congress, in this matter, will be thwarted by the instructions of the Post-office Department.

The Department has given instructions that a simple business card or address printed on the back or face of a letter, (with a view to its being returned to the writer, if not called for.) *is not to be regarded, unless a person shall indorse on it in writing, his or her name as writer thereof.*

It is obviously of importance in the extensive correspondence of merchants, bankers, and others, that mis-sent letters, or letters that for any reason may be uncalled for at the place of address, shall, within a reasonable time, be returned to the writers. This is especially the case with all remittances of money, notes, and drafts ; all legal documents, insurance policies, &c. It is obvious, too, that persons and institutions having extensive correspondence cannot undertake to indorse *in writing* each letter to be dispatched by mail.

Many of our moneyed institutions and bankers mail hundreds of letters, each, daily ; and they avail themselves of the clearness secured by *printing* their own address on some portion of their envelopes. As by the new interpretation of the law, such letters, if misdirected, are liable to go to the Dead letter Office at Washington, we would suggest that the following form or notice be printed upon valuable letters. This is done by many persons now, and we learn that the Post-office authorities consider such a notice will secure the speedy return to the writers of letters uncalled for, viz. :—

This letter, if not called for at the end of thirty days, to be returned to A. B., banker (or bank,) New York city.

This notice need occupy a small space only in the upper corner, or on the flap or back, of a letter. It will not only secure the early return of a letter if uncalled for at the point of destination, but, in the numerous cases of misdirected or unpaid letters, will enable the postmaster or clerks to return them immediately to the writers for correction.

COMMERCIAL REGULATIONS.

PLATE PAPER.

TREASURY DEPARTMENT, December 21, 1860.

SIR:—I have considered your report of the 1st ultimo on the appeal of the Director of the Observatory of Harvard College from your decision exacting a duty on certain plate paper imported for the use of that college, and which the appellant claims should be exempted from duty under the provision in the tariff of 1857 for articles imported for the use or by order of seminaries of learning, viz.:—"All philosophical apparatus, instruments, books, maps, and charts; statues, statuary, busts, and casts, of marble, bronze, alabaster, or plaster of Paris; paintings, and drawings, etchings; specimens of sculpture; cabinets of coins, medals, gems, and all collections of antiquities—provided, the same be specially imported in good faith for the use of any society incorporated or established for philosophical or literary purposes, or for the encouragement of the fine arts; or for the use or by the order of any college, academy, school, or seminary of learning in the United States." It would appear from the letter of the Director that the paper in question, though imported in blank, is intended for the sole use of the college, and is to receive engravings of astronomical objects to be published by the college and distributed gratuitously in all parts of the country. Though it may be intended to be manufactured into "books," "maps," or "charts," it is not a "book," "map," or "chart," when imported; and the law levies the duty upon the article in the character and condition in which it is imported. Plate paper, it will be observed, is not enumerated in the foregoing list of articles exempted from duty when imported for the use and by order of seminaries of learning, and the Department is not aware of any other provision of law that would entitle it to free entry. You were justified in treating the article as dutiable, and your decision to that effect is affirmed. I am, very respectfully,

PHILIP F. THOMAS, Secretary of the Treasury.

JAMES S. WHITNEY, Collector, &c., Boston, Mass.

TRIMMING GOODS.

TREASURY DEPARTMENT, December 31, 1860.

SIR:—I am in receipt of your report upon the appeal of Messrs. BAARE, GIER & Co. from your decision assessing a duty at the rate of 24 per cent under the classification in schedule C of the tariff of 1857, on certain articles styled by the importers "trimming goods," as "articles worn by men, women, or children, of whatever material composed, made up or made wholly or in part by hand." The appellants claim entry of the articles in question at the rate of 19 per cent as "manufactures of silk or of which silk shall be a component material, not otherwise provided for." The articles in question, it would seem, judging from the samples submitted, are composed wholly or in part of silk, made by hand and machinery, and intended to be attached to cloaks and dresses as ornaments. They are known as "dress ornaments," and if they are composed wholly or in part of silk, and are not in a fit condition when imported to be worn upon the person, but required to be sewed upon the garment, they ought, in the opinion of the Department, to be subjected to a duty of 19 per cent under the classification in schedule D of "manufactures of silk or of which silk is a component material, not otherwise provided for." Such of the articles, however, if any there are, covered by the protest and appeal in this case, as do not require, in order to be worn upon the person, to be attached by sewing or otherwise to a dress or garment, but are in a fit condition when imported to be so worn, were rightfully subjected by you to a duty of 24 per cent under the classification in schedule C to which you referred them on the entry. I am, very respectfully,

PHILIP F. THOMAS, Secretary of the Treasury.

JAMES S. WHITNEY, Esq., Collector, &c., Boston, Mass.

COLORED LITHOGRAPHS.

TREASURY DEPARTMENT, JANUARY 25, 1861.

SIR:—I acknowledge the receipt of your report on the appeal of Messrs. J. J. GRIFFIN & Co. from your decision assessing a duty at the rate of 15 per cent: as unenumerated in any schedule of the tariff of 1857, on certain "colored lithographs" imported by them, the appellants claiming entry of the articles in question free of duty under the classification in schedule I of "paintings and statuary." The sample submitted shows the article to be a lithograph colored in oil, and is so admitted by the parties. It cannot, in the opinion of the Department, be regarded as a "painting" within the meaning and spirit of the law; nor is it, it is believed, so known in the trade, but it must be held to be a "colored lithograph," and, as such, liable to duty at the rate of 8 per cent under the classification in schedule G of "engravings or plates," in conformity with the decision of the United States Circuit Court for the southern district of New York, in the case of *M. KNOEDLER vs. A. SCHELL*, acquiesced in by the Department. I am, very respectfully,

JOHN A. DIX, Secretary of the Treasury.

AUGUSTUS SCHELL, Esq., Collector, &c., New York.

MOSAICS, SET.

TREASURY DEPARTMENT, JANUARY 26, 1861.

SIR:—I am in receipt of your report, under date of the 17th ultimo, upon the appeal of JACQUES SCHIEB from your assessment of duty at the rate of 24 per cent under the classification in schedule C of the tariff of 1857, of "cameos, real and imitation, and mosaics, real and imitation, when set in gold, silver, or other metal," on certain mosaics imported by him. The appellant claims entry of the articles in question at the rate of 4 per cent under the classification in schedule H of "cameos and mosaics, diamonds, gems, pearls, rubies, and other precious stones, not set." The question which arises in this case is, are the mosaics in controversy "set" or "not set"? The samples submitted with the appeal show the article to be a mosaic or mosaics encased in German silver, and are in the opinion of the Department ready for use, with but the slight addition of a pin or hook to convert them either into breastpins or ear rings without further setting. The plain mode of setting in this instance does not remove them from the classification to which they were referred by you on the entry. Your decision, therefore, is hereby affirmed. I am, very respectfully,

JOHN A. DIX, Secretary of the Treasury.

AUGUSTUS SCHELL, Esq., Collector, New York.

PACKAGES.

TREASURY DEPARTMENT, JANUARY 28, 1861.

SIR:—The Department has had under consideration the appeal of Messrs. S. & W. WELSH from your decision assessing a duty at the rate of 24 per cent as "manufactures of iron, &c.," under schedule C of the tariff of 1857, on certain iron packages or casks containing caustic soda, the appraisers having estimated the separate value of the iron casks containing the alkali. The appellants claim entry of the packages in question at the rate of 4 per cent, the caustic soda duty—alleging that they are rendered valueless from the action of the alkali on them, and are of no further use except as receptacles for the article they contain. It does not appear, in this case, that there was any intention to evade the law or defraud the revenue, but that sheet iron casks were used because in their opinion they were the most suitable description of packages for caustic soda. In view of all the facts in the case, the Department is of the opinion that the casks in question are entitled to entry at the same rate of duty as imposed on caustic soda, to wit, 4 per cent. I am, very respectfully,

JOHN A. DIX, Secretary of the Treasury.

J. B. BAKER, Esq., Collector, Philadelphia, Pa.

SKELETONS.

TREASURY DEPARTMENT, December 27, 1860.

SIR :—I acknowledge the receipt of your report, under date of the 26th ultimo, on the appeal of Messrs. OODMAN and SHURTLEFF from your decision subjecting to duty at the rate of 24 per cent under the tariff of 1857, certain "human skeletons" as "preparations or manufacture of bone," and provided for in schedule C. The articles in question are not specified by name in any schedule of the tariff. The bones of which they are composed are in their natural form and merely held together in their natural order, by a metallic wire, the metal not being the component material of chief value. They ought not, in the opinion of the Department, to be classed as a manufacture of bone, or of bone and metal, but should be treated as non-enumerated, and subject to a duty of 15 per cent. I am, very respectfully,

PHILIP F. THOMAS, Secretary of the Treasury.

AUGUSTUS SCHELL, Esq., Collector, &c., New York.

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

NEW YORK RAILROADS.

The annual report of the New York Central Railroad Company for the fiscal year ending 30th September, 1860, has been received. This is one of the leading roads of the Union, and one that has contributed largely to the commercial prosperity of the State. There has been no interruption to the semi-annual dividends of the company since its formation in 1852. The company has realized upwards of fifty-two millions of dollars from passengers and freight during the past seven years, viz. :—

EARNINGS FROM PASSENGERS, FREIGHT, AND ALL OTHER SOURCES FOR THE YEARS ENDING SEPTEMBER 30, 1853-1860.

Years.	Passengers.	Freight.	Other sources.	Total.
1853	\$2,829,668	\$1,835,572	\$122,279	\$4,787,520
1854	3,151,518	2,479,820	286,999	5,918,334
1855	3,242,229	3,189,602	181,749	6,563,581
1856	3,207,378	4,828,041	171,928	7,707,348
1857	3,147,636	4,569,275	320,388	8,027,251
1858	2,582,646	3,700,270	205,495	6,528,412
1859	2,566,869	3,837,148	297,380	6,200,848
1860	2,569,265	4,095,988	292,048	6,957,241

Total..... \$52,690,538

The expenses for 1860 were as follows :—

PAYMENTS OTHER THAN FOR CONSTRUCTION.

For transportation expenses—passenger business..	\$1,665,014 11	
For freight business.....	2,618,826 70	
		\$4,278,840 81
For interest, including interest on debt certificates held for the sinking fund..	\$985,272 04	
For sinking funds.....	115,266 50	
For rent of Niagara Bridge and Canandaigua R. R.	50,000 00	
		1,160,538 54
For dividends: No. 13. Feb., 1860, 3 per cent....	\$720,000 00	
No. 14. Aug., 1860, 3 per cent....	720,000 00	
		1,440,000 00

Transportation expenses for the year ending September 30th, 1860, 61.49 per cent of the gross earnings.

NEW YORK AND PENNSYLVANIA RAILROADS.

State.	Roads in operation. Miles.	Cost of roads in operation.	Passengers carried.
New York	2,527	\$147,980,402 21	12,188,059
Pennsylvania	2,086	180,373,076 10	6,867,141
Over Pennsylvania	441	.....	5,470,918
Over New York .....	.....	\$2,392,673 79	.....
State.	Tonnage. Tons.	Receipts from passengers.	Receipts from freight.
New York	3,859,283	\$7,618,785 69	\$9,907,216 62
Pennsylvania	20,851,102	5,281,861 00	11,894,455 00
Over Pennsylvania .....	.....	\$2,337,574 69	.....
Over New York	16,991,819	.....	\$1,417,238 38
State.	Total receipts.	Total expenses.	
New York	\$18,368,004 58	\$11,089,550 91	
Pennsylvania	18,186,604 00	14,107,444 00	
Over Pennsylvania	\$174,400 58	.....
Over New York .....	.....	\$2,017,393 09	

In the cost of the several works, Pennsylvania is \$2,392,673 79 ahead of New York. In the passenger traffic, seven-eighths of the number reported in Pennsylvania are local, and the same may be said of the tonnage, of which 9,133,348 tons were coal, 1,900,864 tons were merchandise, and the balance iron, iron ore, flour, lumber, etc., products of the State. The Pennsylvania Central being the only line connected with the West, but little of what is called "through freight" has been carried over it.

Out of an average, during the last five years, of 772,549 tons, it carried east 14 per cent, west 10½ per cent. The Baltimore and Ohio, out of an average of 810,802 tons, carried east 16½ per cent, west 7½ per cent. And the New York Central, out of 776,940 tons, carried east 25½, west 5½ per cent. On the Erie Canal, out of the average of 3,804,907 tons, its through tonnage east was 1,928,613, west 254,670 tons, including the local traffic.

The traffic, therefore, on the Pennsylvania roads has hitherto been local. Hereafter, when the connections and the second track is complete on the Pennsylvania Central, and when the Sunbury and Erie is complete to Erie, and the branch extending to Pittsburg, the results will be greater. Nine millions tons of coal is an item of some importance; and when we realize the fact that the business in pig metal was last year over 90,000 tons greater than the product of all other States together; that the manufacture of railroad iron, in 1856, was 83,894 tons, out of 141,554 tons made in the country; that the anthracite iron trade, in 1856, reached 236,160 tons; in 1857, 281,880 tons, and that the leading branches of industry is \$185,000,000 per annum. But the State is a "one-horse team," and as the trade of Philadelphia, ten years since, was moved by 7,000 vessels, and last year 32,000, exclusive of those required in the movement of 3,000,000 tons through the Delaware and Raritan Canal, were required, we may recognize an improvement. The organization of a line of propellers to bring over the coal at a reduction of 50 cents per ton, is another of the schemes in which New York is interested. Fifty cents a ton off 4,000,000 tons consumed in the eastern market, is \$2,000,000 per annum—enough almost to pur-

have the canal and make it a free channel to the producer. It may also indicate to our citizens that the route of which the canal forms a part may enable them to reach and intercept the trade they are about to lose on the North, and perhaps bring back to our waters the *Gaul-way* and other lines that have left us.

RAILROADS OF THE UNITED STATES, JANUARY, 1861.

The following table gives the mileage and cost of railroads in each portion of the Union :—

	Total length of line.	Miles in op- eration.	Cost of roads and equipment.
North Eastern States—			
Maine.....	639.36	475.86	\$16,233,261
New Hampshire.....	684.29	657.88	22,676,234
Vermont.....	555.37	575.37	23,240,097
Massachusetts.....	1,386.63	1,314.35	59,777,878
Rhode Island.....	136.82	104.82	4,188,888
Connecticut.....	782.90	607.76	20,948,380
	4,185.37	3,715.54	\$147,014,288
Middle Atlantic States—			
New York.....	3,455.37	2,808.96	145,259,792
New Jersey.....	844.76	627.28	30,395,031
Pennsylvania.....	3,972.26	2,943.22	151,529,629
Delaware.....	170.69	186.69	4,370,766
Maryland and District of Columbia.....	701.81	405.81	19,979,284
	9,144.89	6,921.96	\$351,534,492
South Atlantic States—			
Virginia.....	2,483.62	1,805.04	69,580,696
North Carolina.....	1,212.04	886.92	17,084,500
South Carolina.....	1,074.47	978.47	22,045,486
Georgia.....	1,724.20	1,401.50	27,632,690
Florida.....	736.50	326.50	6,561,000
	7,230.82	5,398.43	\$142,904,321
Gulf States—			
Alabama.....	1,438.90	643.40	17,262,487
Mississippi.....	870.80	697.80	22,986,370
Louisiana.....	881.00	327.75	12,193,124
Texas.....	2,667.00	294.50	9,200,000
	5,807.70	2,063.45	\$61,640,981
South Interior States—			
Arkansas.....	701.33	38.56	1,800,000
Missouri.....	1,430.60	813.10	35,398,093
Tennessee.....	1,412.63	1,233.54	30,793,180
Kentucky.....	763.90	531.20	16,551,600
	4,309.46	2,666.34	\$4,542,873
North Interior States and California—			
Ohio.....	4,133.25	3,057.03	117,853,116
Michigan.....	1,412.10	807.30	33,615,761
Indiana.....	2,522.27	2,058.17	71,973,669
Illinois.....	3,551.90	2,924.60	106,975,581
Wisconsin.....	2,272.09	937.09	37,580,881
Iowa.....	2,021.80	548.80	17,257,905
Minnesota.....	1,167.00	.....	2,000,000
	17,080.41	10,332.99	\$386,756,913
California.....	343.23	70.06	3,600,000
Total United States, Jan., 1861.....	48,100.89	31,168.76	\$1,177,993,818
“ “ Jan., 1859.....	.....	27,857.00	961,047,364

TRAFFIC RETURNS OF ENGLISH RAILWAYS.

A late number of *Herapath's London Railway Journal* contains a careful table, compiled by Mr. J. T. Hackett, which gives the annual earnings of all the railroads in the United Kingdom, for seven years, to January 1st, 1860. Calling the £ \$5 00, we herewith append some of the results of Mr. Hackett's table:—

TOTAL RECEIPTS.		AVERAGE TRAFFIC PER MILE PER WEEK.	
1854.....	\$92,995,275	1854.....	\$18,020
1855.....	101,505,765	1855.....	13,340
1856.....	110,753,505	1856.....	13,815
1857.....	118,643,325	1857.....	13,720
1858.....	116,604,820	1858.....	13,155
1859.....	125,580,585	1859.....	13,665
1860.....	135,129,415	1860.....	14,235

The total traffic for the year 1860 shows an increase of \$9,598,830 over the preceding year.

In addition to the above returns, there are others of various railways in the United Kingdom, which have not been published weekly or monthly, and of which estimates have to be made. These results show that there are 52 railways, being, in the aggregate, 611 miles in length, upon which \$43,073,750 has been expended, the traffic receipts being about \$2,754,500. By adding these figures respectively to the 9,662 miles upon which \$1,606,062,250 of capital was expended, and the 135,129,415 referred to in the table given, it appears that there are 10,273 miles of railway, which have cost \$1,649,126,000, and produced, in the shape of gross traffic receipts, \$137,883,915. This sum, compared with the total receipts on 9,883 miles of railway in 1859, amounting to \$127,880,585, shows an increase of \$10,003,330, or about 8 per cent, thus exhibiting a very satisfactory increase on the traffic of the preceding year.

The capital accounts have not been much increased, as compared with former years, notwithstanding the increased mileage, and that of itself is a most satisfactory indication of better results for the ordinary shareholders. The above figures show an aggregate increase in the capital accounts for the year of only \$38,030,500, while the increase in the traffic alone exceeds \$10,000,000. This result contrasts favorably with the operations of former years, as will be readily seen by a glance at the annexed table. The judicious, and, in some respects, necessary outlay of capital, to accomplish the actual requirements of increased traffic, and to provide useful and indispensable extension lines at a moderate cost, provided that the aggregate amount of capital thus expended be not more in any one year than four times the increase in the gross traffic for the same period, the result must tend to increase the dividends of railways, and gradually enhance the value of railway property.

It is impossible to calculate the vast amount of benefit railways have conferred on the people and trade of the United Kingdom, and, in fact, on the people and trade of every country where they have been brought into operation. That railways should be made highly remunerative to the proprietors by good management, and by affording every reasonable facility to the public, and the districts through which they pass, would be nothing more than a just reward to the individuals concerned in railway undertakings, for incalculable benefits conferred on the community at large.

The following table presents an interesting and comprehensive exhibit of railway progress in the United Kingdom for the years named. We omit the column showing the capital expended at the end of each year for the time named, merely remarking that the total cost to 1860 had been \$1,649,136,000.

Year.	Average cost per mile.	Total traffic receipts.	Average receipts per mile.	Working expenses, rates & taxes.	Length open at end of year.	Per cent'ge of receipts on capital exp.	Per cent'ge of profit on capital.
1842	\$38,362	\$4,470,700	\$2,748	40	1,630	8.82	4.98
1843	34,929	5,022,650	2,895	40	1,786	8.28	4.94
1844	34,290	5,814,980	2,982	40	1,950	8.70	5.22
1845	33,726	6,909,270	3,080	40	2,243	9.13	5.48
1846	30,903	7,945,870	2,797	42	2,840	9.05	5.25
1847	30,924	9,277,670	2,501	42	3,710	8.08	4.69
1848	33,333	10,445,100	2,258	42	4,626	6.77	4.06
1849	33,110	11,688,800	2,000	42	5,960	5.93	3.44
1850	34,286	13,142,235	1,944	42	6,783	5.70	3.31
1851	34,186	14,987,810	2,163	42	6,928	6.32	3.67
1852	33,816	15,843,610	2,118	45	7,337	6.27	3.44
1853	33,912	17,920,530	2,305	44	7,774	6.80	3.80
1854	34,113	20,000,520	2,491	46	8,028	7.80	3.98
1855	35,425	21,123,315	2,577	47	8,240	7.24	3.90
1856	34,122	22,995,500	2,625	48	8,761	7.69	4.00
1857	33,492	24,162,465	2,684	48	9,171	7.87	4.19
1858	33,000	23,763,764	2,484	48	9,568	7.52	3.91
1859	32,603	25,576,100	2,588	48	9,833	7.94	4.18
1860	32,106	27,576,783	2,685	47½	10,273	8.37	4.39

SOUTH CAROLINA RAILROADS.

The following returns show the quantity of the leading articles of cotton, grain, live stock, etc., carried into Charleston by the South Carolina Railroad, from 1844 to 1860 inclusive :—

Years.	Cotton. Bales.	Flour. Bbls.	Grain. Bush.	Naval stores. Bbls.	M'dse. Bales.	Live stock.
1844.....	186,638	.....	.....	.....	.....	.....
1845.....	197,657	.....	.....	.....	.....	.....
1846.....	186,271	12,148	2,369	48	.....	.....
1847.....	184,302	19,048	338,848	3,189	.....	.....
1848.....	274,364	15,447	903,485	5,753	.....	4,280
1849.....	339,996	1,507	66,904	13,919	10,632	5,285
1850.....	284,985	125	15,515	10,353	11,138	5,859
1851.....	287,590	526	547	4,198	12,310	4,179
1852.....	364,729	2,533	15,652	4,316	15,227	4,894
1853.....	340,865	23,319	109,092	8,992	15,863	8,029
1854.....	350,857	62,651	136,536	21,642	11,109	12,056
1855.....	449,554	80,463	817,662	23,093	9,835	11,021
1856.....	386,349	84,808	456,994	15,079	9,985	11,769
1857.....	251,850	145,970	717,274	13,232	11,427	9,214
1858.....	428,452	140,069	282,367	17,418	9,605	12,001
1859.....	393,390	73,529	128,854	33,237	10,240	14,043
1860.....	314,619	23,216	36,179	54,439	12,853	15,213

CITY AND STATE RAILROADS.

From the annual report of the State Engineer and Surveyor, just submitted to the Legislature, we derive some interesting and instructive facts bearing upon the great railroad interests of this State. For example, during the year, no fewer than eighteen new companies have been formed. The passenger business of the city railroads is increasing in a ratio far beyond the anticipations of the projectors. The whole number of passengers carried on these roads during the

past twelve months is 49,980,148, while upon all the other roads only 9,305,978 have been carried, and the amount received for passenger business on the city roads is \$2,326,383 10, while the amount on the other roads is \$7,880,591 65. The average sum received for carrying each passenger on the city roads is nearly 4 cents, while on the other roads it is only about 2 cents for each mile. If we assume that each city passenger is carried on an average a distance of two miles, his rate of fare would be about the same as on the other roads.

The total cost of construction and equipment of all the roads in the State is set down at \$137,048,335 19. The statement annexed shows the enormous business for the year:—

BUSINESS OF THE YEAR—PASSENGER TRANSPORTATION.

Miles run by passenger trains.....	16,815,520
The same, excluding city roads.....	5,905,891
Number of passengers of all classes carried in the cars.....	59,286,126
The same, excluding city roads.....	9,805,978
Number of miles traveled by passengers, or number of passengers carried one mile, city roads not included	382,985,207

FREIGHT TRANSPORTATION.

Miles run by freight trains.....	6,969,454
Number of tons carried on freight trains.....	4,741,778
Total movement of freight, or number of tons carried one mile.....	564,050,505

CLASSIFICATION OF FREIGHT.

	Tons.
Products of the forest.....	378,424
Products of animals.....	895,519
Vegetable food.....	1,103,640
Other agricultural products.....	143,219
Manufactures.....	511,916
Merchandise.....	783,811
Other articles.....	930,241

Total tonnage.....	4,741,778
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The total cost of operating the roads was \$7,331,761 19. The following shows the—

EARNINGS AND PAYMENTS.

From passenger business.....	\$10,206,974 75
The same, excluding city roads.....	7,880,591 65
From freight business, city roads excluded.....	11,839,556 68
From other sources.....	795,710 48
The same, excluding city roads.....	757,450 76

Total earnings	\$22,842,241 91
The same, excluding city roads.....	20,477,599 69

PAYMENTS OTHER THAN FOR CONSTRUCTION.

For transportation expenses.....	\$14,887,983 83
The same, excluding city roads	12,652,676 72
For interest.....	3,952,892 61
The same, excluding city roads.....	3,915,991 04
For dividends on stock.....	2,475,536 75
The same, excluding city roads.....	1,895,943 75
Amount carried to surplus fund	699,892 42
The same, excluding city roads	591,087 04

Total payments.....	\$21,406,805 61
The same, excluding city roads.....	19,062,698 55

These results are interesting chiefly to the stockholders, but we come next to the certain grim facts which will only impress the general public, and all who

have occasion to trust themselves to the care of the iron horse. Sextons and undertakers, especially, will be interested in the annexed record of accidents, within the period specified in the engineer's report :—

Number of passengers killed.....	18
Number of passengers killed, excluding city railroads.....	11
Number of passengers injured.....	36
Number of passengers injured, excluding city roads....	22
Number of employees killed.....	28
Number of employees injured.....	17
Number of others killed.....	111
Number of others injured.....	45
Total number killed.....	152
Total number injured.....	98
Total number killed, including city roads.....	143
Total number injured, including city roads.....	71

HORSE RAILROADS OF BOSTON AND VICINITY.

There are at present twenty horse railroads established in Boston and vicinity, a number of which are leased to connecting roads running into Boston. The aggregate of the capital and business of these roads is reported as follows :—

Total amount of capital of the road is.....	\$4,675,000
Cost.....	1,974,558
Cost of equipment.....	710,557
Total length, miles, (single and double track).....	66
Number of horses owned.....	1,870
Cost of horses.....	167,253
Number of cars owned.....	208
Number of conductors employed in 1860.....	165
Number of drivers.....	168
Number of hostlers.....	112
Total number of persons regularly employed in 1860.....	663
Number of passengers carried in 1860.....	18,695,193

No passengers received injury in consequence of any blame attached to the employees of the roads.

NORTH CAROLINA AND HER RAILROADS.

The wisdom of the liberal State aid to railways has been fully vindicated by the policy of North Carolina. The rapid increase of national wealth produced by the liberal encouragement of public works within her limits, has rapidly extended the basis of taxation, and secured, indirectly, a full return for the aid of State credit which she has systematically granted. Lands which, ten years ago, sold for 10 cents an acre, now bring \$16 per acre. The assessed value of the real estate of North Carolina and its rapid enhancement are shown by the following figures:—In 1815 it was \$53,521,513. For the succeeding 21 years, it diminished—being only \$51,021,317 in 1836. During the next 14 years it increased only about \$4,500,000, and was, in 1850, \$55,600,000. In 1850, the State initiated its policy of granting the aid of its bonds to railway enterprises. During the five succeeding years the assessed value of the real estate within her borders had increased over \$43,000,000 ! and from 1855 to 1860, \$28,000,000 more ! making the assessed value, in 1855, \$98,075,969 ; and in 1860, \$126,000,000. Most of the works of internal improvement in that State have been contracted since 1850. In 1850 there were only 250 miles of railroad in the State, now there are 834 miles. The increased value of real estate since 1850 yields an annual revenue of \$140,400.

JOURNAL OF MINING, MANUFACTURES, AND ART.

LAKE SUPERIOR COPPER.

The annual circular of Messrs. DUPEL, BECK, and SAYLES, of Boston, contains matter of interest :—

The depression in the market for Mining Shares, noted in our Circular for 30th ult., continued till the 15th December. Since the latter date there has been a gradual improvement. This has been due to the canceling of a large number of time contracts, to a less stringent money market, and to the advance in ingot copper. Early in the month a few small lots of refined copper were sold at 19 cents, cash. At present there is a good demand for export at 20 cents, cash.

While the market prices for shares have fallen below those of the panic of 1857, it is gratifying to know that, during 1860, much real progress has been made in the management of the mining interests at Lake Superior. Much, it is true, remains to be done to bring down the costs of production to offset the decline in price of refined copper. For the five years prior to 1860 ingot copper has ranged from 29½ cents, four months, about the maximum, to 19 cents, cash, the minimum price. During 1860, the highest price was 24½ cents, cash, the lowest 19 cents, cash.

To meet the probabilities of a continuance of prices of copper below the average of the past six years, there will be an united effort, on the part of all the managers of the mines, to introduce more rigid economy into every department. Already much has been accomplished in 1860 over previous years. Freights to and from the mines from May to September were 25 per cent less than in 1859. The transportation of a ton of copper from the Lake Shore to Boston, cost, after the opening of St. Mary's Canal, 1855, \$20; in 1860, to Boston, \$11, and to New York, \$9. The substitution of bituminous coal for wood, which has been delivered during the past summer at the wharves of Portage Lake for \$3 35 per ton, will save much money and leave the forests of the country for building materials and for timbering of the mines. With the wants of a rapidly increasing population, new and cheaper sources of supply are constantly opening in the region itself. Many agricultural products, hitherto sent up at a great cost from Lower Michigan, are now raised in the neighborhood of the mines, and at the new settlements on the southwestern shores of the Lake, cheaply and abundantly. At Portage Lake, a machine shop, an iron foundry, and a manufactory of doors, sashes, blinds, &c., have been put in operation during 1860. The Smelting Works of the Portage Lake Company are now successfully refining the products of that district. These works consists of four reverberatory and two cupola furnaces, capable of refining six thousand tons per annum. The buildings are of the most thorough and substantial character, and the location of the works accessible, at a very small cost of transportation, to all the mines now wrought, or likely to be wrought for many years hence, in that neighborhood. Hitherto, to save cost of transportation to the Smelting Companies in other States, it has been necessary to dress the rough copper to an average, probably, of 70 per cent. Now, by the proximity of the furnaces to the mines, a dressing of 50 per cent. will answer the same purpose, while the refined copper, hitherto rarely ready for the market before the 1st to 15th July, will now be sent directly from the Lake to New York or Boston, arriving there, in ordinary seasons, by the 1st of June. Further, there will be added the new facility of obtaining cash advances through the winter, on the warehouse receipts of the Smelting Company.

The opening of the entry into Portage Lake, during the past season, has been one of the greatest improvements in the navigation of Lake Superior since the completion of the ship canal around the falls of St. Mary's River. At the comparatively small cost of \$50,000, steamers of the largest class, able to pass

through the St. Mary's Canal, may now enter Portage Lake, and discharge their cargoes at the docks of the several companies located on the shores of that lake. Beside avoiding the loss of time and transshipment, hitherto necessary, the opening of Portage Lake has provided one of the most capacious and safest harbors in the world.

In the Ontonagon District, a plank road has been completed recently, facilitating to a very great extent the transportation to and from the Minnesota, National, Rockland, and Superior mines.

THE ST. MARY'S CANAL MINERAL LAND Co.'s explorations have been confined during the past year to their lands in the neighborhood of Portage Lake. The Albany and Boston vein has been opened with good promise on Section 5, lying north of that location.

The **IRON** interests of Lake Superior are rapidly attaining great importance. The amount brought down to Marquette, the port of shipment, in 1860, was,—Of iron ore, from the Jackson Co., 62,980 tons; Cleveland Co., 47,889; Lake Superior Co., 39,394; total, 150,263. Of pig iron, Pioneer Co., 3,050 tons; S. R. Gay, 1,800; Northern Co., 650; total, 6,500. Ore valued at \$3; pig at \$25; aggregate value, \$588,289.

ALBANY AND BOSTON.—This company's mining operations were commenced at Portage Lake, about the 15th June last. Since that date, all the buildings requisite for the enterprise, including a steam saw-mill, have been erected, and the vein, the widest and richest at the surface yet seen in the district, explored for 2,800 feet. This lode, when discovered, was supposed to be identical with the Pewabic. Recent explorations have determined that it is a distinct formation, and that this company possesses a mile in length of each of what are now termed the "Albany and Boston," and the "Pewabic" veins. The A. & B. lode, so far as exposed, is from five to thirty feet in width, carrying, in almost every part of it, rich barrel and stamp work. The regular mining work has already made good progress.

CENTRAL.—The shipments this season have been 78.6 tons of 75 per cent copper. The product would have been larger had it not been for the delay in time between the expiration of the lease of the Northwestern Co's stamps and the erection of new ones by the Central Co.,—a period of about four months. The new stamps, 48 heads, at the last date, were in perfect running order.

COPPER FALLS.—Shipments this season have been on Company's account 239 tons; on tributer's account 89 tons, both yielding over 84 per cent. The November product was nearly 18 tons of 85.7 per cent purity. The new stamping machinery, two heads (Ball's), it is presumed will be in operation by February 1st next. It is expected to be more powerful than any of that patent hitherto erected. As the mine has been largely opened the product should hereafter be very much increased.

FRANKLIN.—The mining operations of this company for 1860 have resulted in opening a large amount of stoping ground, preparatory to a large product for next year. In the meantime the product for the year ending November 30, has been 112 masses, weighing 72,166 lbs.; 721 barrels of barrel work, 469,116 lbs.; and 67 barrels stamp work, 63,816 lbs. Total, 605,098 lbs., equal to 180.7 tons refined copper. The actual shipments were about 267 tons rough, or 158 tons ingot copper. The stamps are Ball's, consisting of two pairs of two heads each. They did not commence work till November 19. Up to the latest dates their results were entirely satisfactory. An assessment of \$2 per share has been called, payable January 1st. This amount paid in will place the Franklin among the first-class mines.

HANCOCK.—The stamping machinery, 16 heads of improved Cornish, it is understood, is about ready for working up a large accumulation of vein stuff. Shipments in 1860, 72 tons.

HURON.—Total shipments this year 65.4 tons of 64½ per cent barrel work and 12,311 pounds of refined copper, smelted at the Portage Lake works. There is ready for the stamps an amount equivalent, at a fair estimate, to the quantity shipped this season.

ISLE ROYLE.—November returns not received. They will probably exceed

40 tons. Total shipments this season 458.6 tons, averaging over 70 per cent. Preparations have been made for opening a large amount of ground during the winter, with a view to large shipments at the opening of navigation.

MESNARD.—All the work thus far has been preparatory to future extensive operations.

NATIONAL.—November product 71.7 tons. Total shipments in 1860 were 692.8 tons. A dividend of two dollars per share will probably be paid in February.

PEWABIC.—November product 304.8 tons. The actual shipments for the season have been 2,727,632 pounds. The product for one year to November 30, was as follows:—

467 masses weighing 348,658 lbs.; 2,294 barrels kiln or barrel work weighing net 1,450,778 lbs.; 342 barrels No. 1, Stamp, 379,718 lbs.; 399 barrels No. 2, Stamp, 389,973 lbs.; 401 barrels No. 3, Stamp, 346,912 lbs.; add on tributer's account, 27,428. Total, 2,943,467 lbs.

The smelting returns are not yet all made, but on an estimate, based on past experience, the result will not vary much from 2,030,992 lbs., or about 1,000 tons of ingot copper.

During the year there have been shipped 1,533 ounces of silver.

The annual products of the Pewabic mine have been as follows:—1855, 19 197 tons rough, or 11.0895 ingot, value \$1,080 19; 1856, 96.799 rough, or 65.823 ingot, value \$31,492 23; 1857, 204.342 rough, or 118.127 ingot, value \$44,058 29; 1858, 379.568 rough, or 208.301 ingot, value \$76,538.02; 1859, 742.167 rough, or 520 ingot, value \$196,551 62; 1860, 1,458.019 rough (besides tributers') or ingot, estimated, 1,007 994, value \$403,988 80.

A full report of the company's affairs will be published as soon as the accounts, made up to this date, are received from the mine.

PHŒNIX.—The product shipped during 1860, was 31½ tons rough of about 83 per cent, or nearly 26 tons refined copper. A very large amount of stoping ground has been opened in readiness for the new stamping machinery of 48 heads (Wayne's) now, probably, in full operation. The equipment of this mine in the matter of machinery, including one of the most powerful steam engines at the Lake, is in every respect of the most substantial character. An instalment of \$1 per share is called for, payable January 12th.

PITTSBURG AND BOSTON.—November product 114 tons. Total shipments 1.357 tons. Total product for the year 1,402 tons. The annual report recently published gives the result of the year ending December 1, 1859. The product, for that year was 1,099.8 tons, yielding 64.35 per cent., or 707.5 tons ingot copper. The receipts, including \$2,405 17 from sales of silver, were \$292,503 14. The expenditures were \$272,175 75, leaving net profit \$20,327 39. The assets of the company December 1, 1859, over its liabilities, were, exclusive of mining property, furnaces, warehouses, and docks, \$122,050 68. The result of 1860, as far as indicated by the increased shipments, the constantly improving condition of the mine, of which minute accounts are given in the report; the very large addition of stamping machinery (Hodge's) now about in working order; and the great purchase of the property of the North American Mining Co., consisting of 2,300 acres, with all the equipments of a mine, for \$100,100—all combine to make the Cliff mine one of the most valuable of its class in the world.

PONTIAC.—An assessment of \$1 per share has been called, payable December 14th inst. Like the Mesnard, the principal work at present is in opening the mine extensively for future production.

QUINCY.—November product 172 tons. Shipments in 1860, in masses, 55.6 tons, stamp work 377.2 tons; barrel work 419.4 tons. Total, 852.2 tons. The mine has 64 heads of Wayne's stamps. They stamped in November 3,078 tons of rock, producing 88½ tons of copper.

ROCKLAND.—Total shipments for 1860, 441 masses and 707 bbls. of kiln and stampwork, weighing net 1,105,367 lbs., or 552.7 tons. This is an increase of 205 tons over last year. The increased attention paid to keeping ground opened ahead almost guarantees a largely increased product for 1861.

SUPERIOR.—Shipped in 1860 19 masses and 37 barrels. Net weight 14 tons 123 lbs. Last year the shipment was but 1.7 tons.

TOLTEC.—The recent movement in this stock is the alleged discovery on its tract of the Minnesota vein. All accounts concur in the richness of the surface show.

PORCUPINE MOUNTAIN DISTRICT.—The principal mining company working in this district is the Carp Lake Co. This company has shipped during the past season 20½ tons rough copper. Operations have already progressed sufficiently to warrant the erection, early next season, of Hodge's stamping machinery.

COMPARATIVE TABLE OF SHIPMENTS OF ROUGH COPPER FROM LAKE SUPERIOR DURING THE SEASONS OF 1859 AND 1860.

[The weight of the barrels have been deducted and the results are given in tons of 2,000 lbs. and tenths.]

KEWEENAW DISTRICT.			ONTONAGON DISTRICT.		
	1859.	1860.		1859.	1860.
Central.....	172.8	78.6	Adventure.....	139.4	29.7
Clark.....	5.6	7.2	Aztec.....	15.8	4.9
Connecticut.....	24	5.8	Bohemian.....	3	
Copper Falls.....	329.4	328	Evergreen Bluff.....	27	41.9
Eagle River.....	6		Hamilton.....	7	7.9
North American.....	8.7		Mass.....	12.8	
Northwest.....	78.8	108.5	Minnesota.....	1,623.6	2,188.4
Phoenix.....	32	31.2	National.....	323.2	692.8
Pittsburg and Boston..	1,254.5	1,357	Nebraska.....	9.8	26.4
Summit.....	4		Norwich.....	22	
			Ogima.....	35.4	
	1,910.8	1,910.8	Ridge.....	27.8	
			Rockland.....	347	552.7
			Superior.....	1.7	14
			Toltec.....	9.4	
				2,597.6	3,553.7
PORTAGE DISTRICT.			RECAPITULATION.		
O. C. Douglass.....		24	Keweenaw District....	1,910.8	1,910.8
Isle Royale.....	241.3	258	Portage.....	1,533.1	3,050.8
Franklin.....	204.7	267	Ontonagon.....	2,597.6	3,553.7
Hancock.....		7.2	Porcupine Mountain...		20.5
Huron.....	7.4	78	Sundry mines.....		7.6
Mesnard.....	.6				
Pewabic.....	784.4	1,368.8			
Portage.....	8.7				
Quincy.....	336	852.2			
	1,533.1	3,050.8		6,041	8,543.4

This 8,543.4 tons rough are equal to 6,000 tons ingot copper, valued at \$420 per ton; or, in the aggregate, two millions five hundred and twenty thousand dollars.

STATEMENT OF PUBLIC TRANSACTIONS IN MINING SHARES DURING DECEMBER 1860, WITH THE AMOUNT PAID IN PER SHARE, AND THE OPENING AND CLOSING PRICES FOR THAT PERIOD. EACH COMPANY HAS ISSUED 20,000 SHARES.

Paid in per Shares				Paid in per Shares			
	share.	sold.	Op'n'g. Clos'g.		share.	sold.	Op'n'g. Clos'g.
Central.....	\$4 85	3,000	\$6 75	\$5 62	Petherick....	1 50	4 2 50
Copper Falls.....	21 00				Pewabic.....	3 75	608 38 00 34 00
Franklin.....	4 50	195	19 00	19 50	Phoenix.....	8 00	
Hancock.....	2 50	2,718	2 50	2 25	Pit'sb'g & Bost	5 55	126 40 00 52 00
Huron.....	4 00	400	5 00		Pontiac.....	2 00	1,692 *2 37 †8 00
Isle Royale..	16 10	4,360	7 62	6 87	Quincy.....	10 00	69 28 50 27 87
Mesnard.....	2 50	3,427	2 50	3 50	Rockland.....	5 00	503 18 00 17 25
Minnesota....	3 50	214	66 00	66 00	Superior.....	4 00	408 2 00 2 37
National.....	5 50	84	28 50	30 00	South Side...	1 00	245 1 00
North Cliff... 2 50		55	1 00	1 00	Toltec.....	17 00	1,684 2 37 2 00

* Prior t assessment.

† Assessment paid.

FIRE-PROOF SAFES.

It is obvious that in the construction of a chest designed to be not only burglar but fire-proof that iron as a material would naturally suggest itself. Nevertheless, oak seems formerly to have been a favorite material, probably from the facility of working and ornamenting. An example of this kind of coffer is afforded in the chest in which the crown jewels of Scotland were deposited in 1707. The chest, beautifully ornamented, was secured with iron bands, hasps, and staples. There were three locks, which then no doubt afforded security, but each of them could be opened in five minutes with a bit of crooked wire in our day. At the close of the last century there began to be made the iron chests known as "foreign coffers." These were constructed of sheet iron strongly riveted to hoop iron crossed at right angles on the outside; a lock, throwing eight bolts inside and two bars and staples for padlocks outside, were employed to secure the lid; over the door lock was a cap, beautifully pierced and chased, and a secretly operated escutcheon concealed the key-hole. These were formidable to look at, and no doubt answered their purpose all the better, that the science of lockpicking was then not so advanced as in the present day.

About the beginning of the present century, cast iron chests began to be made for commercial purposes, and the manufacture flourished to a considerable extent. The idea of introducing non-conducting substances as a protection against fire, occurred but some years later. The favorite substance for this purpose is gypsum, or plaster of Paris. The same material was applied to fire-safes in Paris, and these were to some extent imported into New York about the year 1820.

The first actual application of plaster of Paris to safes in this country seems to have been by JAMES CONNER, the type founder, of New York. His business made him acquainted with the non-conducting qualities of plaster of Paris, and he applied it to an iron chest in his office, which chest has been in use ever since. Soon after JESSE DELANO, of New York, began making chests of the Paris pattern, substituting solid cast iron heads to secure the bands. In 1826, he patented an improvement which consisted in coating the wooden foundation with a composition of equal parts clay, lime, plumbago, and mica, or saturating the wood in a solution of potash and alum, to render it incombustible.

The first portable fire-proof chests introduced for sale in this city, were imported from France by the late JOSEPH BOUCHERRED, Esq., about 1820, and no doubt many of our old merchants and bankers remember them, as many were sold for use in counting-houses and bank vaults; they were constructed of wood and iron. The foundation was a box of hard close-grained wood, covered on the outside with plate iron, over which were hoops or bands of iron about two inches wide, crossing each other at right angles, so forming squares on all sides of the chest; holes were made in the bands and plates, through which well made wrought iron nails, or spikes, having "hollow," half-spherical heads, were driven into, and through, the wooden box, and then "clinched"—the inside of the chest was then lined with a covering of sheet iron. These chests had a well-furnished but very large lock, having from six to eight bolts operated by one turn of the key.

After Mr. DELANO, C. J. GAYLER began the safe manufacture, and in 1833 he patented his "double" fire-proof chest. This consisted of two chests, one so

formed within the other as to leave one or more spaces between them to enclose air or any known non-conductors of heat. In the same year, one of these double chests was severely tested by being exposed in a large building in Thomaston, Maine, that was entirely destroyed by fire. The chest preserved its contents in good order. This excited the public admiration, and one enthusiastic writer described it as a "Salamander," which name has ever since been popularly applied to safes.

The majority of the so-called "safes" in use at the time of the great fire in New York in 1835, were simply iron closets, and were of little protection against the devouring element. There were then about sixty of GAYLER's *double chests* in use, and they earned a character for the means with which they preserved books and securities. The fire of 1835, notwithstanding, stimulated ingenuity in the construction of safes, and JOHN SCOTT obtained a patent for the use of asbestos for fire-proof chests. He mixed that material with plaster of Paris and water, and spread it on from one to three inches thick on a wooden foundation or box. The composition was then covered with sheet iron, secured by bands or bar iron. In the following year, Mr. JAMES MATTHEWS, of New York, patented a composition for fire-proof safes, consisting of Roman cement, soapstone, alum, and glue. In 1837, BENJAMIN SHERWOOD, of New York, obtained a patent for a circular revolving safe within a safe, and claimed the exclusive right to the use of boiled gypsum and pulverized charcoal in equal proportions, mixed with water, and poured into the space between the inner and outer plates of each safe. In 1840, B. G. WILDER obtained a patent for a construction known as the "WILDER patent." This has had very good success. There is in New York two manufacturers of these—B. G. WILDER & Co., and A. S. MARVIN & Co.

In the same year Mr. FITZGERALD got out a patent for the combination of a safe with a counting-house desk. In 1843, the same person obtained a patent for the use of plaster of Paris alone or with mica, in the construction of fire-proof safes. In 1855, HOLMES G. BUTLER patented an improvement in the mode of applying alum filling in safes. The Messrs. SPEAR, of Philadelphia, obtained a patent for the use of the residuum of the materials used in the making of soda water, for safes. There have been many patents obtained for the use of plaster of Paris mixed with other substances. The leading articles used up to this time, however, are plaster of Paris, clay, and cement. These materials have furnished the manufacturers with the means of various combinations, for which greater or less advantages are claimed. The American safes are no doubt superior to those made in any other part of the world.

The main object of the safes enumerated has been protection against fire. In 1851, however, LEWIS LILLIE, of Troy, obtained a patent for a burglar proof chilled iron safe, that has come into vogue with the bankers. The mode of construction is peculiar, a foundation or box is made of bars of wrought iron, crossing each other at right angles, and placed near each other so as to form a compact net work. The inside of this box is filled with sand, and placed in a mould with an open space of from one to two or more inches all around the outside. Into this space is poured cast iron, which becomes thoroughly chilled and hard, like the plowshare, and impervious to a drill. The door is made in the same manner, and secured by a Derby combination lock. There are other modes of combining the same materials for effecting the same object.

STATISTICS OF AGRICULTURE, &c.

AREA OF THE UNITED STATES.

One of the most interesting and instructive statistical tables compiled under the supervision of the government at Washington is one which shows the area in square miles and acres of the several States and territories of the Union. We present it as compiled at the General Land Office:—

AN EXHIBIT OF THE AREA OF THE SEVERAL STATES AND TERRITORIES OF THE UNITED STATES.

States of the Union.	Square miles.	Acres.	States of the Union.	Square miles.	Acres.
Maine.....	35,000	22,400,000	Maryland.....	11,124	7,149,360
New Hampshire	9,280	5,939,200	Virginia.....	61,352	39,250,280
Vermont.....	10,212	6,535,680	North Carolina.	50,704	32,450,560
Massachusetts..	7,800	4,992,000	South Carolina..	34,000	21,760,100
Rhode Islands..	1,806	835,840	Georgia.....	58,000	37,121,000
Connecticut....	4,750	3,040,000	Kentucky.....	34,080	24,115,100
New York.....	47,000	30,000,000	Tennessee.....	45,600	29,184,000
New Jersey....	8,320	5,324,800	Texas.....	274,356	175,587,840
Pennsylvania...	46,000	29,440,000			
Delaware.....	2,120	1,306,800	Total.....	744,604	476,540,560
Land States.	Square miles.	Acres.	Land States.	Square miles.	Acres.
Ohio.....	39,964	25,575,640	Florida.....	59,268	37,981,520
Indiana.....	33,809	21,687,960	Alabama.....	50,722	32,462,080
Michigan.....	56,451	36,128,760	Mississippi.....	47,166	30,179,080
Illinois.....	55,410	35,162,400	Louisiana..	41,846	26,461,440
Wisconsin.....	53,924	34,228,800	Arkansas.....	52,198	33,406,720
Iowa.....	55,075	35,228,800	Missouri.....	65,350	41,824,000
California.....	188,981	120,947,800			
Oregon.....	95,274	60,975,360	Total.....	978,429	626,194,560
Minnesota.....	88,531	55,459,840	D. of Columbia.	60	38,400
Territories.	Square miles.	Acres.	Territories.	Square miles.	Acres.
Kansas.....	126,288	80,821,120	Utah.....	220,196	140,925,400
Nebraska.....	342,438	219,160,820	Indian.....	67,020	42,892,800
Minnesota.....	81,960	52,484,400			
Washington....	198,071	128,565,440	Total territories.	1,287,277	823,857,280
New Mexico...	256,309	164,037,760	" land surface	3,010,277	1,926,686,800

To which added water surfaces, lakes, rivers, &c., we have a surface of over 3,250,000 square miles.

The aggregate area of the land States and territories is upward of 1,450,000,000 acres.

RUSSIAN TRADE AND HARVEST.

The London *Times* gives a review furnished by Mr. C. MATVEIEFF of the results thus far ascertained of the Russian grain harvest, which shows that, "although it will not realize the expectations originally entertained, it is likely on the whole to be very good both in quality and quantity. The drawbacks sustained have been from heat and drought, and consequently, while the autumn-sown crops which had previously gained strength have proved extremely abundant, those of the spring have been starved, and in many instances, destroyed. In the Moscow district the weather was most favorable until July, and although from that date the want of rain was much felt, the damage to the rye crops was

less than had been feared. The hay crop, which had been cut two or three weeks earlier than usual, turned out a full average and of superior quality. The spring-sown grain—principally oats—is expected to be under the average. With regard to the other parts of the empire, separating it into four divisions, the results appear to be as follows:—1. East and southeast.—The quantity and quality of autumn-sown corn full average, and that of spring-sown much below the average. 2. South and southwest.—Autumn-sown (rye and wheat) most abundant; spring-corn full average. 3. West and northwest.—Autumn-sown, (principally rye, wheat being less cultivated here than in the southwest.) full average; spring-sown only an average. 4. North and northeast.—Autumn corn (rye) very good, both in quantity and quality; spring-sown a full average. From Siberia the reports describe the weather to be most beautiful and highly favorable for the crops, which were making great progress; the final result, however, had yet to be ascertained. With regard to other than cereal productions, the promise throughout the country seems to be satisfactory. The linseed crops have also suffered from the heat, but, owing to the quantity sown, the expectation is that, under any circumstances, they will be larger than those of last year. In respect to live stock it is stated that the supplies of beasts at Moscow have been so large that the prices of meat have fallen fifty per cent since March. The graziers had sent forward these supplies expecting an increased demand from a prosperous manufacturing business, and an augmentation of a number of workmen, and also in the belief that the combination among the speculators would succeed in keeping up the price of tallow. but the inland trade at all the principal fairs proved bad from the unfavorable harvest of last year and the collapse in the money market, and the manufacturers, instead of requiring more labor, find themselves with heavy stocks on hand. The latest accounts from Nischni—the greatest fair in Russia, are said to be deplorable. Concerning the future supply of tallow the opinion is that it will not be small. It is already known that the quantity from Samara will be about thirty-five thousand casks. Siberia is also certain to send as much as her recent contribution or more, as she is said to be making remarkable progress with this product. Since 1835 her annual supply has increased from eighteen thousand casks to forty thousand, exclusive of a few thousand casks retained for candle factories. The Ukraine likewise promises a larger yield this year, in consequence of good weather and the abundant harvest.

AGRICULTURE OF IRELAND, 1860.

The following statistics, from the official bureau in Dublin, will no doubt be read with general interest:—

AGRICULTURAL STATISTICS OF IRELAND FOR THE YEARS 1859 AND 1860.

	1859.	1860.	Increase.	Decrease.
Wheat .....acres	464,175	469,652	5,467	.....
Oats.....	1,982,662	1,961,384	....	21,278
Barley.....	177,894	180,964	3,070	.....
Bere and rye.....	13,196	12,822	....	376
Beans and peas.....	14,851	12,745	....	2,106
Total.....	2,652,780	2,637,557	8,537	23,760
Decrease in cereal crops in 1860.....acres				15,223

	1859.	1860.	Increase.	Decrease.
Potatoes.....acres	1,200,817	1,171,837	....	28,980
Turnips.....	322,187	318,691	....	3,496
Mangel wurzel and beet root.....	27,054	32,060	5,006	.....
Cabbage.....	31,680	22,749	....	8,931
Carrots, parsnips, & other green crops	21,971	21,680	....	291
Vetches and rape.....	33,243	40,533	7,290	.....
Total.....	1,636,482	1,607,483	12,296	41,245
Decrease on green crops in 1860.....				28,949

GENERAL SUMMARY.

	Acres.
Increase on meadow and clover in 1860.....	157,375
Decrease in cereal crops in 1860.....	15,223
Decrease in green crops in 1860.....	28,949
Decrease in flax crops in 1860.....	7,838
Total increase in extent of land under crops in 1860.....	105,365

TOTAL EXTENT IN STATUTE ACRES OF CEREAL AND GREEN CROPS.

	1859.	1860.
Wheat.....	464,175	469,632
Oats.....	1,982,662	1,961,384
Barley.....	177,894	180,964
Bere and rye.....	13,198	12,822
Beans and peas.....	14,851	12,745
Potatoes.....	1,200,847	1,171,837
Turnips.....	322,187	318,691
Mangel and beet root.....	27,054	32,060
Cabbage.....	31,680	22,749
Carrots, parsnips, and other green crops.....	21,971	21,613
Vetches and rape.....	33,243	40,533
Flax.....	136,282	128,444
Meadow and clover.....	1,437,111	1,594,486

RETURN OF LIVE STOCK.

	Horses.	Cattle.	Sheep.	Pigs.
1859.....	629,095	3,815,598	3,592,304	1,265,751
1860.....	620,988	3,599,235	3,537,946	1,268,590
Decrease.....	8,107	216,363	54,358	Inc. 2,839

PRODUCING MANURE FROM ATMOSPHERE.

The London *Chemical News* contains an article on this very important subject by two French chemists. The value of guano and most other concentrated manures consists, to a considerable extent, of the ammonia which they contain. As three-quarters of the atmospheric air consists of nitrogen, and as hydrogen forms one-ninth of all pure water, if some cheap means could be found for inducing the hydrogen of water to enter into combination with the nitrogen of air in the form of ammonia, this valuable manure could be produced in unlimited quantities, and the agricultural products of the world enormously increased. The production of ammonia at a low price has been a problem of the highest interest to agriculturists. It is composed of nitrogen and hydrogen.

Atmospheric air is an inexhaustible and gratuitous source of nitrogen. How-

ever, this element presents so great a difference in its chemical reactions, that, notwithstanding the numerous attempts which have been made, chemists have not heretofore succeeded in combining it with hydrogen so as to produce ammonia artificially. MM. MARGUERITTE and DE SOURDERAL, the chemists alluded to, have succeeded in making it artificially from the atmosphere, baryta. The following is the operation :—In an earthen retort is calcined, at an elevated and sustained temperature, a mixture of carbonate of baryta, iron filings in the proportion of about thirty per cent, the refuse of coal, tar, and saw dust. This produces a reduction to the state of anhydrous baryta, of the greater part of the carbonate employed. Afterwards is slowly passed a current of air across the porous mass, the oxygen of which is converted into carbonic oxyd by its passage over a column of incandescent charcoal, while its nitrogen, in presence of the charcoal and barium, transforms itself into cyanogen, and produces considerable quantities of cyanide. In effect, the matter sheltered from the air and cooled, and washed with boiling water, gives with the salts of iron an abundant precipitate of Prussian blue. The mixture thus calcined and cyanuretted is received into a cylinder of either cast or wrought iron, which serves both as an extinguisher and as an apparatus for the transformation of the cyanuret. Through this cylinder, at a temperature less than 300 degrees, (Centigrade,) is passed a current of steam, which disengages, under the form of ammonia, all the nitrogen contained in the cyanide of barium. It is impossible to foresee all the results of this great discovery. Among other things, it suggests the production of nitric acid from the air by oxydizing ammonia.

SHOEING OF CAVALRY HORSES.

The following circular has just been issued from the Horse Guards, by the Adjutant-general of the British army :—

SIR :—It being very desirable that a uniform system of shoeing should be established in the cavalry, and the whole of that important subject having been recently referred to the consideration of a board composed of officers of great experience in that branch of the service, assisted by two old and experienced professional men, the General Commanding in Chief has been pleased to direct that the following instructions, extracted from their report, and which embody the whole of their recommendations, be circulated throughout the cavalry, accompanied by duplicates of the pattern shoes, which have been sealed and deposited at the office of Military Boards for general reference and guidance.

1. The shoe is to beveled off, so as to leave a space and prevent pressure to the sole.
2. It is not to be grooved or fettered; but simply punched and the nails counter-sunk.
3. Calking is to be applied to the hind shoe only, and is to be confined to the outside heel. The inside heel is to be thickened in proportion.
4. The weight of the shoes is to be from twelve to fifteen ounces, according to the size of the horse.
5. As a general principle, horses are to be shod with not less than six nails in the fore and seven in the hind shoe; nor is this shoe to be attached with not fewer than three nails on either side.
6. In preparing the foot for the shoe, as little as possible should be pared out, and the operation should be confined to the removal of the exfoliating parts of the sole only.
7. Both the fore and hind shoes are to be made with a single clip at the toes.

STATISTICS OF POPULATION, &c.

UNITED STATES CENSUS FOR 1860.

The returns furnished by the Census Bureau to the Governors of States for the purpose of apportioning members of Congress gives the following aggregates:—

	Population.		Apportionment.	
	1850.	1860.	New.	Old.
Maine.....	588,169	619,958	5	6
New Hampshire.....	317,976	326,072	3	3
Vermont.....	314,129	315,827	3	3
Massachusetts.....	994,514	1,281,494	10	11
Rhode Island.....	147,545	174,621	1	2
Connecticut.....	370,792	460,670	4	4
New York.....	3,097,894	3,851,563	30	33
Pennsylvania.....	2,311,766	2,916,018	23	25
New Jersey.....	489,555	676,084	5	5
Ohio.....	1,980,427	2,377,917	19	21
Indiana.....	988,416	1,350,802	11	11
Illinois.....	851,470	1,691,233	13	9
Michigan.....	397,654	754,291	6	4
Wisconsin.....	305,391	768,485	6	4
Iowa.....	192,214	682,000	5	2
Minnesota.....	6,077	172,793	1	2
Oregon.....	18,294	52,566	1	1
California.....	92,597	384,770	3	3
Kansas.....	.....	143,645	1	1
Total.....	13,454,169	18,950,759	150	149

SOUTHERN STATES.

	Population in 1850.			Population in 1860.			Appor't.
	Free.	Slave.	Total.	Free.	Slave.	Total.	
Delaware.....	89,242	2,290	91,532	110,548	1,805	112,353	1 1
Maryland.....	492,666	90,368	583,034	646,183	85,382	731,565	6 6
Virginia.....	949,133	472,528	1,421,661	1,097,373	495,826	1,593,199	11 13
North Carolina.....	580,491	288,548	869,039	679,965	328,377	1,008,342	7 8
South Carolina.....	283,523	384,984	668,507	308,186	407,185	715,371	4 6
Georgia.....	524,508	381,682	906,185	615,336	467,400	1,082,736	7 8
Florida.....	48,135	39,309	87,445	81,885	63,800	145,685	1 1
Alabama.....	428,779	342,892	771,623	520,444	435,473	955,917	6 7
Mississippi.....	296,648	309,878	606,526	407,051	479,607	886,658	5 4
Louisiana.....	272,953	244,809	517,762	354,245	312,186	666,431	4 4
Arkansas.....	162,797	47,100	209,897	331,710	109,065	440,775	3 2
Texas.....	154,431	58,161	212,592	416,000	184,956	600,956	4 2
Tennessee.....	763,154	239,460	1,002,717	859,528	287,112	1,146,640	8 10
Kentucky.....	771,424	210,981	982,405	920,077	225,490	1,201,214	8 10
Missouri.....	594,622	87,422	682,044	1,085,595	115,619	1,145,567	9 7
Dist. of Columbia	48,000	3,687	51,687	.....	.....	75,321	. .
Total.....	6,470,503	3,204,099	9,664,650	8,484,126	3,999,283	12,508,780	84 89

TERRITORIES.

Nebraska... ..	.....	23,893
New Mexico ...	61,547	93,024
Utah.....	11,354	50,000
Dacotah.....	.....	4,339
Washington....	.....	11,624
Total Territories... ..	72,901	188,370
Total United States.....	23,191,376	31,647,859

IMMIGRATION IN CANADA.

We have, says the *Spectator* of Canada, through the kindness of the government emigrant agent in this city, been favored with the following comparative statement of the arrival and final settlement of immigrants from January 1st, 1857, to December 31st, 1860 :—

COMPARATIVE STATEMENT OF THE ARRIVAL OF IMMIGRANTS FOR THE YEARS 1857 TO 1860, BOTH INCLUSIVE.

	1857.	1858.	1859.	1860.	Total.
England.....	6,850	3,523	2,885	1,149	14,407
Ireland.....	5,942	2,505	1,743	1,453	11,643
Scotland.....	3,180	1,925	1,165	629	6,899
Germany.....	14,679	9,689	6,427	4,000	34,795
Norway.....	4,158	2,470	1,988	391	8,957
Total.....	34,809	20,112	14,158	7,622	76,701

SETTLED IN CANADA.

	1857.	1858.	1859.	1860.	Total.
England.....	8,992	1,591	1,146	591	7,320
Ireland.....	2,048	1,020	1,743	566	5,377
Scotland.....	1,674	1,245	1,165	456	4,540
Germany.....	1,916	1,032	513	562	4,023
Norway.....	....	....	15	...	15
Total.....	9,630	4,888	4,582	2,175	21,275

From the above it will be seen that out of 76,701 immigrants who have been drawn to this city from the five leading emigrating countries in Europe, 21,275 only have settled in this and the Northwestern portion of Canada, while 55,426, or over two-thirds of the arrivals, have passed on to the Western States. That there is some reason for this, is apparent to the most superficial observer. The purposes of human life—and especially among the emigrating classes—are not formed and completed without the powerful motive of improvement of circumstances, and it is equally certain that flaming placards and insinuating tales of untold wealth, to be found in the Eldorado of the West, have had an undue influence in directing so many Europeans to that portion of the continent which, like a maelstrom, has swallowed up their last dollar and left them a prey to the sharpers who infest these regions. With the exception of the Germans arrived here, eight-ninths of whom have passed through to the Western States, and out of 8,957 Norwegians we have secured 15. The inhabitants of the British Isles are the greatest dupes to those misrepresentations. In Scotland, it must be admitted, that the public are either better enlightened or they possess a stronger love of country, for fully two-thirds of the Scottish emigrants have settled in the Province.

ARRIVALS OF IMMIGRANTS IN NEW YORK FOR THE PAST TEN YEARS.

1850.....	212,706	1857.....	183,773
1851.....	289,601	1858.....	78,539
1852.....	300,992	1859.....	79,322
1853.....	284,954	1860.....	103,621
1854.....	319,223		
1855.....	186,233	Total.....	2,181,487
1856.....	142,342		

For a few years past no regular record has been kept of the amount of moneys that immigrants have brought into the country, but allowing \$76 *per capita*,

which is a fair average, it will be seen from the following table that the several countries have contributed as follows :—

Ireland.....	\$3,546,184	West Indies.....	\$0,596
Germany.....	2,860,336	Nova Scotia.....	1,976
England.....	844,512	Sardinia.....	6,916
Scotland.....	114,456	South America.....	8,056
Wales.....	61,484	Canada.....	1,758
France.....	111,720	China.....	988
Spain.....	17,252	Sicily.....	304
Switzerland.....	104,816	Mexico.....	1,672
Holland.....	32,528	Russia.....	4,636
Norway.....	5,016	East Indies.....	904
Sweden.....	26,448	Turkey.....	152
Denmark.....	37,620	Greece.....	152
Italy.....	40,848		
Portugal.....	1,444		
Belgium.....	5,624	Total.....	\$7,875,196

POPULATION OF PENNSYLVANIA.

We publish below the returns of the census of Pennsylvania, as taken by the United States Marshals, which shows a gratifying increase of population, enabling Pennsylvania to retain her rank as the second State of the Confederacy. We have re-arranged the order of the table, in order to show the numerical importance of the separate counties, and have added the returns for 1840 and 1850, as follows :—

	1840.	1850.	1860.		1840.	1850.	1860.
Philadelphia...	258,087	408,762	568,034	Huntingdon...	35,484	24,786	28,204
Alleghany.....	81,235	188,290	180,074	Adams.....	23,044	25,981	27,997
Lancaster.....	84,208	98,944	116,621	Blair.....	.....	21,777	27,785
Berks.....	64,569	77,129	94,048	Center.....	20,492	23,355	27,067
Luzerne.....	44,006	56,072	91,089	Somerset.....	19,650	24,416	26,920
Schuylkill....	29,053	60,713	90,178	Bedford.....	29,335	23,052	26,803
Chester.....	57,515	66,438	74,749	Clarion.....	.....	23,565	25,575
Montgomery...	47,241	58,291	70,494	Venango.....	17,900	18,310	25,189
York.....	47,010	57,450	68,088	Columbia.....	24,267	17,710	24,608
Bucks.....	48,107	56,091	63,803	Greene.....	19,147	22,136	24,406
Westmoreland.	42,699	51,726	54,020	Lawrence....	.....	21,079	23,218
Bradford.....	32,769	42,831	50,046	Perry.....	17,096	20,088	22,940
Erie.....	31,344	38,742	49,687	Carbon.....	.....	15,666	21,239
Crawford.....	31,724	37,849	49,041	Warren.....	9,278	13,671	19,299
Lehigh.....	25,787	32,472	48,932	Clearfield....	7,834	12,586	18,925
Dauphin.....	30,118	35,754	48,640	Jefferson.....	7,253	13,518	18,414
Northampton..	40,996	40,235	47,775	Clinton.....	8,323	11,207	17,722
Washington...	41,279	44,939	47,319	Monroe.....	9,879	13,270	16,805
Franklin.....	37,793	39,904	42,242	Mifflin.....	13,092	14,980	16,378
Cumberland....	30,953	34,327	40,402	Juniata.....	11,080	13,029	16,300
Fayette.....	33,574	39,112	40,166	Snyder.....	.....	.....	15,129
Lycoming.....	22,649	26,257	37,560	Union.....	22,787	26,083	14,222
Mercer.....	32,873	33,172	37,164	Montour.....	.....	13,239	13,110
Susquehanna..	21,195	28,688	36,665	Wyoming.....	.....	10,655	12,644
Armstrong....	28,365	29,560	36,114	Potter.....	3,371	6,048	11,467
Indiana.....	20,782	27,170	33,809	Fulton.....	.....	7,567	9,140
Butler.....	22,378	30,346	33,753	McKean.....	2,975	5,254	9,000
Wayne.....	11,848	21,890	32,172	Pike.....	3,832	5,881	7,360
Tioga.....	15,498	23,987	31,218	Elk.....	.....	3,531	5,848
Delaware.....	19,791	24,679	30,614	Sullivan.....	.....	3,694	4,440
Lebanon.....	21,872	26,071	30,030	Forest.....	.....	..	889
Beaver.....	29,868	26,639	29,821				
Cambria.....	11,256	17,773	29,818				
Northumberland.	20,027	23,272	29,057				
				Total....	1,724,083	2,311,786	2,913,041

POPULATION OF IOWA.

	1840.	1850.	1860.		1840.	1850.	1860.
Dubuque.....	3,069	10,841	31,387	Page .....	....	561	4,418
Lee	6,093	18,861	29,296	Chickasaw.....	....	....	4,386
Scott.....	2,140	5,986	25,994	Floyd.....	....	....	3,744
Clayton.....	1,101	3,873	20,746	Butler .....	....	....	3,714
Des Moines.....	5,577	12,988	19,707	Harrison.....	....	....	3,634
Linn.....	1,373	5,444	19,020	Taylor.....	....	204	3,591
Clinton	821	2,822	19,013	Mitchell.....	....	....	3,414
Jackson.....	1,411	7,210	18,509	Howard.....	....	....	3,168
Henry	3,772	8,707	17,783	Guthrie.....	....	....	3,068
Johnson.....	1,491	4,472	17,589	Ringgold.....	....	....	2,928
Van Buren.....	6,146	12,270	17,084	Webster .....	....	....	2,507
Marion.....	....	5,482	16,811	Union .....	....	....	2,110
Muscatine.....	1,942	5,731	16,454	Hamilton .....	....	....	1,701
Jefferson.....	2,773	9,904	14,920	Cass.....	....	....	1,608
Mahaska .....	....	5,989	14,838	Adams.....	....	....	1,494
Wapello.....	....	8,471	14,596	Franklin.....	....	....	1,389
Washington.....	1,594	4,957	14,277	Greene.....	....	....	1,378
Winneshiek.....	....	546	13,940	Montgomery....	....	....	1,275
Davis.....	....	7,264	13,771	Woodbury.....	....	....	1,124
Jones.....	471	3,007	13,331	Adair.....	....	....	984
Keokuk.....	....	4,822	13,282	Cerro Gordo....	....	....	940
Cedar.....	1,253	3,941	12,976	Monona.....	....	....	818
Allamakee.....	....	777	12,246	Shelby.....	....	....	818
Fayette.....	....	825	12,097	Grundy.....	....	....	787
Appanoose.....	....	3,131	11,933	Worth.....	....	....	766
Polk.....	....	4,513	11,639	Wright.....	....	....	652
Delaware.....	168	1,759	11,050	Audubon.....	....	....	454
Louisa.....	1,927	4,939	10,492	Kossuth.....	....	....	409
Warren.....	....	961	10,287	Crawford.....	....	....	345
Jasper.....	....	1,280	9,879	Humboldt.....	....	....	332
Decatur.....	....	965	8,692	Carroll.....	....	....	282
Monroe.....	....	2,884	8,619	Sac.....	....	....	246
Benton.....	....	672	8,503	Dickinson.....	....	....	180
Black Hawk....	....	135	8,269	Hancock.....	....	....	175
Iowa .....	....	832	8,075	Winnebago....	....	....	168
Buchanan.....	....	517	7,907	Plymouth.....	....	....	149
Madison.....	....	1,179	7,520	Calhoun.....	....	....	147
Marshall.....	....	338	6,717	Palo Alto.....	....	....	132
Wayne.....	....	340	6,413	Emmett.....	....	....	105
Poweshiek.....	....	615	5,672	Pocahontas.....	....	....	103
Lucas.....	....	471	5,608	Cherokee.....	....	....	59
Clark.....	....	79	5,484	Buena Vista...	....	....	57
Hardin.....	....	....	5,475	Clay.....	....	....	52
Boone.....	....	735	5,430	Ida.....	....	....	43
Tama.....	....	8	5,291	Sioux.....	....	....	10
Dallas.....	....	854	5,230	O'Brien.....	....	....	8
Fremont.....	....	1,244	5,069	Buncombe.....	....	....	....
Pottowatamie..	....	7,828	4,967	Osceola.....	....	....	....
Bremer.....	....	....	4,896				
Story.....	....	....	4,600	Total	43,112	192,214	676,435
Mills.....	....	....	4,478				

MIGRATION FROM BREMEN AND HAMBURG.

	Bremen.	Hamburg.		Bremen.	Hamburg.
1850.....persons	25,776	7,430	1856	36,517	26,203
1851	37,493	12,279	1857	49,448	31,566
1852	58,551	29,035	1858	23,177	19,799
1853	53,111	29,480	1859	22,011	13,242
1854	76,875	50,819	1860	29,378	15,953
1855	31,550	18,652			

POPULATION OF THE UNITED STATES.

By a formula published with the census of 1840, by the Franklin Institute *Journal*, the population of the United States was calculated up to 1900, and back to 1750, or for 15 decades. By reproducing the formula, as then published, and adding the numbers as since ascertained by the census of 1850 and that of 1860, we obtain results as follows :—

Date.	By census.	By formula.	Census exceeds formula.
1750 .....	.....	1,015,000	.....
1760 .....	.....	1,455,000	.....
1770 .....	.....	2,054,000	.....
1780 .....	.....	2,059,000	.....
1790	3,929,827	3,928,000	.....
1800	5,805,940	5,844,000	.....
1810	7,239,814	7,207,000	32,814
1820	9,654,576	9,650,000	4,596
1830	12,866,020	12,856,000	10,020
1840	17,069,458	17,068,000	789
1850	23,196,876	22,629,000	562,876
1860	31,648,923	30,007,000	1,641,923
1870 .....	.....	39,890,000	.....
1880 .....	.....	53,200,000	.....
1890 .....	.....	71,000,000	.....
1900 .....	.....	97,000,000	.....

Where the figures of the census exceed those of the formula the disturbance has been caused evidently by immigration. Thus the census 1860 exceeds the figures by formula 1,641,923; but the number who arrived in the country during that time has been 2,518,054, of whom at least sufficient to account for the discrepancy remained. The census of 1850 was 562,876 in excess of the formula; but 1,427,337 immigrants arrived in that ten years. In the previous decades the number of arrivals was small and the discrepancy not large. The formula, then, which has proved so accurate for eight decades may well be depended upon for at least two or three more, and the close of the present century will find, 100,000,000, we trust, united and prosperous people.

POPULATION OF MICHIGAN.

A week or two ago, says the *Detroit Free Press*, the Legislature adopted a resolution calling upon the Secretary of State to furnish the Legislature with a table of the population of the State by townships and counties at the census of 1860. He has complied, and a document has been printed containing the required information. The total population of the State by counties foots up at 757,683, which is the first official statement published, and is an increase of some ten thousand over what it has been heretofore stated.

THE WORLD'S CENTER.

The census develops the curious fact that there are more Scotch descendants in London than in Edinburgh, more Irish than in Dublin, 100,000 more Romanists than in Rome, and more Jews than in Palestine. There are also in the same metropolis no less than 60,000 Germans, 30,000 French, and 6,000 Italians, a very large number of Asiatics, from all parts of the East, and many who still worship their idols.

MERCANTILE MISCELLANIES.

FOREIGN COMMERCIAL ITEMS.

I.—THE SOURCES OF THE NILE—CULTIVATION OF COTTON IN AFRICA.

On the 12th of February, 1861, Mr. PETHERICK, British Consul in the Sudan, who is about to proceed to Africa to explore the sources of the Nile, delivered an address to the merchants of Liverpool. Consul Petherick has been fifteen years a resident in the interior of Africa; and, under the auspices of the Royal Geographical Society, he is about to commence an expedition from his residence at Khartum, in the hope of meeting and assisting Captain Speke, who is starting from Lake Nyanza to explore the yet unknown district lying between there and Kondokoro, and where he hopes to be able to trace the sources of the Nile:—

Mr. PETHERICK said:—"Unbiased by theory myself, I propose what appears to me the most practical way of dissolving the mystery as to the source of the Nile, namely, simply to follow the course of the stream. Capt. Speke, in examining the northern confines of the Lake Nyanza, might probably discover a water-shed, dipping westwards, and be enabled to throw additional light on a stream of considerable magnitude, the existence of which I learned from the Neam-Neam, during my last trading expedition in the year 1858. When, according to my crude calculations, unassisted with instruments, I believed I had arrived near the equator, I learned that the southern extremity of the Neam-Neam territory was defined by a large river, the course of which was distinctly described as flowing from the east towards the setting sun. Taking into consideration that our knowledge extends but a very inconsiderable distance from the west coast into the interior, and that, with the exception of the Niger, our knowledge of the course of other streams is but conjecture, I am induced to believe that this reported river might be either a large tributary to the Congo, or some one or other of the large streams that discharge themselves into the South Atlantic Ocean. It is to this large and navigable river, in the most central point of Africa, that I look forward to establish the first fruits of geographical discovery in connection with British commerce. If a channel, such as described, should be proved to lead from the seaboard into the very heart of Central Africa, the whole produce of the country, in addition to ivory, such as oils, seeds, hides, indigo, cotton, gums, and India rubber, may be obtained in exchange for our manufactures. In addition to India rubber, I have also discovered cochineal; and, with regard to cotton, they would observe that Dr. Livingstone stated that in his quarter of Africa he found indigenous cotton growing in the country without cultivation on the part of the people; they found that the missionaries in Abeokuta, going up the valley of the Niger, observed the same thing; and Mr. Petherick, going up the White Nile from the northward, found the people there growing and manufacturing cotton, and, on the Gold Coast, very large communities of people were engaged in the production of this article. In the quarter which he had visited, he ventured to say that cotton was not only abundant in quantity, but excellent in quality. He found in the country immediately to the interior of Sherboro that cotton was the great staple article of production; the people there were in the habit of producing and manufacturing it, and the clothes which they manufactured were of precisely the same quality as those which we found, from the accounts of missionaries, up the Niger, and highly valued by the people."

II.—CULTIVATION OF COTTON IN AUSTRALIA.

What is required to bring the cotton lands of Australia into cultivation, is

capital and labor. Of these two important essentials, the men of Manchester have no lack. They readily subscribed a hundred thousand pounds when the repeal of the Corn Laws obtained for them cheap bread for their factory hands, and procured them new markets for their manufactures, in exchange for the corn and flour which would be imported. The same sum, judiciously applied, would have gone far to have obtained for them a supply of cotton from Queensland and other parts of the British possessions. With respect to the supply of labor, that is a difficulty which might have been, and would have been overcome, had the necessary capital been forthcoming, by the importation of Coolies and Chinese into the new cotton growing districts. With such magnificent colonies as we possess; with lands suited in every respect for the culture of cotton, which may be purchased for a merely nominal sum; with all our manufacturing skill for producing the necessary implements; and with abundance of capital at our disposal, and with facilities for obtaining labor from India and from China under the new treaty, it will be a crying shame and disgrace to the country, if we continue much longer in our state of precarious dependence upon the cotton growing states of America. Whatever may be done in directing attention to new fields of productiveness, we hope that the unequalled facilities of Queensland will not be overlooked. We are glad to learn that the colonists are fully alive to the importance of providing additional labor, and a memorial is in course of preparation to the authorities, praying for some relaxation in the present regulation respecting the introduction of Coolie emigrants. Now that the treaty of Peking recognizes the right of emigration on the part of Chinese, there can be no difficulty in affording increased facilities to their leaving the country and settling in Australia.—*Australian and New Zealand Gazette.*

III.—THE SUPPLY OF COTTON AND BORNEO.

The prospects of a civil war in America have caused a rise in the price of all descriptions of cotton; and, what is more important, the future supply is now a matter anxiously discussed by our Lancashire spinners. Lord John Russell has proposed to the Manchester Chamber of Commerce, to place the services of Her Majesty's Consuls in all parts of the world at the disposal of any association taking steps to promote the growth of this staple. In his letter he states that the course is an unusual one, but he considers the importance of the case demands it at his hands. Instructions by this mail will be sent to India to increase the growth there. Now is the time for those interested in Borneo to show what can be done there, and it may lead to a protectorate by the British government to Sarawak. It would be well if the government instructed Lord Elgin, or if he took it on himself to call there and at Labuan, to ascertain the causes which led to the interference of Governor Edwards in the affairs of Sarawak, and in other respects gain information for our government of that settlement, and Borneo in general.—*London and China Telegraph.*

IV.—EUROPEAN RAILWAYS.

The yearly statistics of the passenger traffic between France and Great Britain have been published by the French Custom-house, and it appears that the number of passengers arriving at or leaving the French ports, taking arrivals and departures together, were as follows in the year 1860:—Boulogne, 102,829 passengers; Calais, 74,875; other ports, 55,833; total, 233,537 passengers.

In the year 1859, the numbers had been, at Boulogne, 86,579 passengers; Calais, 67,311; other ports, 51,666; total, 205,456 passengers. There is thus an increase at Boulogne of 16,250 passengers, or 18½ per cent; at Calais, of 7,564 passengers, or 11 per cent; at the other ports of 4,267 passengers, or 8 per cent; giving a total increase of 28,081 passengers, or 13 per cent. The total number of passengers between British and Belgian ports amounted to 27,722 in 1860.

V.—INDIGO GROWING IN INDIA.

A deputation from London of gentlemen largely interested in indigo planting in India, consisting of Messrs. Skinner, Begg, Thomas, Mochair, Savi, and Mackinlay, accompanied by Mr. Smollett, M. P., had an interview with the Manchester Chamber of Commerce, on the 28th, for the purpose of seeking the aid of the Chamber in calling the attention of government to the disastrous condition of the indigo districts in Lower Bengal, owing to the non-fulfilment of contracts on the part of the ryots, in which course they appeared to have received direct encouragement on the part of the government officials in India. After a very lengthened sitting, it was unanimously resolved to memorialize Viscount Palmerston, praying that Her Majesty's government would institute immediate and searching inquiry, with a view to redressing the grievances complained of.

VI.—THE FAILURES IN THE LEVANT TRADE.

Public attention is directed to the collapse of a large number of houses, principally Greek, in the Levant trade. The failures within the last few days have been very numerous. To say that further embarrassments are looked for in the same quarter, is merely to echo the feeling in commercial circles, and the remark, therefore, cannot be considered invidious. There is no doubt whatever, that a number of firms in this department of business have embarked in engagements to an extent out of proportion to their capital. The existing embarrassments furnish, consequently, a fresh warning which it may be well for the commercial public to digest. They show that when the practice of relying upon paper credit takes too firm a hold of any branch of trade, there is a worm at the root of its apparent prosperity. Its operations may be based upon shrewd calculations; its profits may be large and legitimate; but a mere accident may affect the pillar of credit upon which the entire superstructure reposes, and its collapse becomes then certain. The present distrust of all Greek paper is scarcely justified by the statements of accounts put forward on behalf of some of the houses that have lately stopped. It is to be observed, too, in mere fairness, that the financial and other establishments which have transactions with the Greek houses, speak highly of their business-like and straightforward conduct. This is a subject which it would perhaps be hardly judicious to pursue further in the present disturbed state of the public mind, yet which cannot be altogether ignored in any record professing to deal with prominent commercial topics.—*London Daily News*.

VII.—BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

The next meeting of this association is to be held at Manchester on Wednesday, the 4th of September, under the Presidency of Mr. William Fairbairn, F. R. S., President of the Literary and Philosophical Society of Manchester. Among the gentlemen who have consented to act as Vice-Presidents, are Lord Stanley, M. P., Sir Philip de Malpas Grey Egerton, Bart., Sir Benjamin Heywood, Bart., Mr. Aspinall Turner, M. P., Mr. Bazley, M. P., and the Bishop of Manchester.

THE LONDON "TIMES"—A GLANCE AT ITS MACHINERY.

The London *Times* is the recognized organ of British public opinion, and is beyond all question the most ably edited and influential journal in the world. Its editorials are essays upon the great political, literary and social topics of the day, and so powerfully written that they have been collected into books; while its correspondence from all parts of the world is an inexhaustible source of information. A complete set of the London *Times* from its commencement forms the most voluminous history of the world in print. All details, therefore, connected with this powerful journal will be read with interest by our readers. A correspondent of the French journal, *Courrier de l'Eure*, after visiting that establishment, furnishes the following particulars:—

I have visited in London the printing office of the *Times*. It is truly something great and wonderful; there is nowhere in France anything of the kind to equal it. At the starting of the paper in 1791, the *Times* consisted of only a single page, and was printed by a hand-press, which struck off one side of two hundred sheets per hour. In 1814, Koenig made a press which struck off 1,800 sheets. In 1827, Applegarth, aided by Courier, constructed a new one, on which 4,000 to 5,000 copies could be printed. In 1828, the same Applegarth established his famous vertical machine, which I examined, and on which 10,000 copies per hour are struck off. Since 1828 the managers of the *Times* have erected another machine, with horizontal cylinders, which strikes off eight copies at once, or about 12,500 per hour. These two presses, which make while at work a deafening noise, and which can be stopped at a moment's notice, are moved by an engine of 45-horse power. Adjoining the room in which is the boiler is a closet containing white marble bathing tubs intended for the workmen in the establishment. They cost ninety guineas.

A compositor on the *Times* must have passed an examination showing that he can set at least 40 lines of 56 letters, or about 2,240 letters per hour. The price paid for type-setting is 11d. per thousand letters, at which rate the compositor can make from 25 to 30 francs in an ordinary day's work. This amounts to about five dollars per day. There are 124 compositors employed, 50 of whom are occupied solely in setting up advertisements. Five or six stenographers take notes of Parliamentary proceedings, at Westminster, and return every quarter of an hour to the newspaper office, to put their copy in shape and let the compositors have it without delay. In this way it often happens that a speech delivered at two o'clock in the morning appears in the journal which is struck off at six o'clock and distributed at seven.

The editorial room is large and well lighted. In the center is a huge oak table, and around the room are little desks finished with every convenience for writing. Adjoining is a dining-room for the editors, and the archive room, where are stored all the files of the *Times* since its foundation. Next to the archive chamber, I saw the proof-readers' rooms, where are hundreds of dictionaries and encyclopædias, in all languages and relating to all subjects. A dozen proof-readers are employed during the day, and another dozen during the night. They have an eating room adjoining that where they work, and their meals are provided at the expense of the establishment.

An another story is a small room where are printed the registers and envelops for the mail papers. Every one of the editors, living in London carries with him

a number of envelopes addressed to the *Times*, so that in any place, where he may happen to be, at the theater, the races, or elsewhere, he can send by a special messengers his copy to the office. The foreign correspondents have envelopes of red paper, which are sent immediately on their arrival from the post-office to the *Times* office. Supplies of paper and ink are constantly kept in readiness. Four thousand pounds of ink are used each week. The paper is weighed in the establishment by a very ingenious machine. It is also postmarked on the spot. The journal appears every morning and evening. But sometimes during the day special editions are issued when important news demands. This extra edition can be prepared in two hours. When I visited the establishment it was one o'clock in the day, and the news had just arrived of the death, at half-past twelve, of ALBERT SMITH. At half-past two the *Times* appeared with his obituary.

The administration of the *Times* has nothing to do with the subscriptions to the paper. SMITH, of the Strand, attends to the mailing of the papers for England, Europe, and, indeed, the entire world. Mr. SMITH takes thirty thousand copies a day, sixteen thousand of which he receives at five o'clock in the morning, and dispatches them by carriers at six o'clock. The other numbers of the *Times* are bought by one hundred and seventy news dealers, who pay in advance. They order each day the number of copies they will need for the day following. They pay 30 centimes for each copy, retailing it at 50 centimes. The management of the paper lose something on each sheet by selling it at such a price, but look to the advertisements for their profits. The charges for these advertisements are, of course, very large, and the amount must be considerable, as the revenue of the *Times* reaches to nearly five millions francs. I was told that one of the proprietors of the *Times* had given as a dowry to his daughter the money accruing from one advertising page of the paper for one year.

The wear and tear produced by the perpetual motion which reigns in this immense establishment is so great that it is necessary to rebuild and strengthen once every two years the lower stories of the building. In the museum I was shown the arms with which some ten years ago the workmen of the establishment, to the number of three hundred and fifty, repressed a disorderly mob.

~~~~~ WOULD I WERE RICH !

These words fell from the lips of a wife, who was surrounded with more blessings than usually falls to the lot of women, if they had been rightly appreciated ; but an error in education had produced a morbid desire for independence and freedom of all care and labor, even the necessary duties of the wife, whose position as the mistress of the household required of her the general oversight of it.

" Would I were rich !" again fell from her lips, as they curled in scorn at the idea of a little care and labor ! " Oh ! if I were rich, I should not be compelled to do a menial's work. I would have overseers in every department, and then I could live at my ease ! I would have servants enough ! I would have my carriage, rich dresses, and diamonds ! Then I should feel happy !"

This is no fiction ; we heard the words as they fell from the lips of one whose elegant figure and intelligent face bespoke one capable of creating a little world of happiness, and shedding a halo of joy upon a thousand hearts. But alas ! an uneasy spirit, a soul of unrest, was shedding a blight on the very atmosphere around, like to the chill that falls upon the air when the sun is eclipsed ! So

the beauty and joy which might have been scattered around by a spirit otherwise so beautiful, was destined to be lost, and the happiness which, were it not for this fatal error, would have been bestowed on a troop of loving friends, was gone forever!

Oh! this desire for wealth by woman! To win it, happiness, hope, honor, and home, with all that makes life worth living for, must be sacrificed at the shrine of Gold!

“ Would I were rich! then should my pride
And loftiest hopes be gratified!
But now, alas! I must endure
A harder fate, for I am poor!
And must I daily toil and work,
Like some poor slave of turbaned Turk?
Caged here at ‘home’ from day to day!
Never! Not I! There is a way
Where I can win the wealth I crave,
And live above the toiling slave!
I will be rich! I will have gold!
Though all my hopes of earth are sold!
I will be rich! in splendor shine!
I will have wealth! It shall be mine!”
Thus spoke this proud, imperious dame,
Who deemed that wealth was honor, fame!

How few in this world rightly appreciate the value of a true education! Woman, truly trained, passes through the world leaving a train of influences that are perennial with glory and honor. But when she has been wrongly educated, she leaves a blight and mildew upon all that is young, fair, and beautiful; for by reason of her greater and more potent influence, so is her pathway marked with glory or dishonor!

A mother's influence is of a high, holy, and Godlike character. She is the “Creator of Men,” and her example must affect the world for weal or woe. And when one who bears such an influence gives her life, soul, and energies, to the love of wealth, such as we have described, and truthfully, too, how long will it be before the world will lose its love of gold, which is but the food of the murderer, robber, and assassin? The picture we have essayed to draw is dark, but it is a true one.

THE ABUSE OF CREDIT.

Credit, although desirable, and in the opinion of many indispensable, in carrying on business of all kinds, is nevertheless indiscretely used, inconsiderately given, and often abused. We purpose to consider by whom the system is abused, and first the creditor himself, in consequence of too great anxiety to sell, when he meets what he considers a good customer, more goods than that customer can pay for without depending on a great many contingencies, oversteps the bounds which prudence would fix and investigation would suggest. The consideration is too often, is he good for it? It should be, will his legitimate business enable him to make prompt payments? If such a question should not receive a satisfactory answer, if it will be evident that the ordinary business transactions of the customer will not warrant him in using the credit which his too willing creditor would extend to him, the bills receivable which the creditor may hold, will be the poorest possible description of available funds, for the property of the debtor must be sacrificed before they can be collected, and the law with all its

uncertainty and delay, will render this mode of settlement slow and tedious. The buyer, too, abuses the credit system, when he allows himself to buy more goods than his regular trade will call for, under ordinary circumstances. It is not all that is sold to the consumer, which is well sold, no matter how good he may be for it, but only what he can conveniently pay for. Men, who have a moderate capital and good credit are tempted to open a mercantile house in a certain location, because it is considered a good location for business, and some of those, who have been long established there, have become wealthy; and in order to make a good appearance, and in that way build up a business at once, they tax their capital and credit to the utmost. The consequence is, that before the foundation is laid, their capital and their credit are both lost. They, with a little more patience, with a little more calculation, with a little more willingness to build up a business gradually, would have used their credit judiciously, and would have saved it and their capital also. The credit system is abused in another way, by selling merchandise which has been bought on time, and which really belongs to creditors, for anything but cash down, or at a stipulated time. The man who finds that he has bought more goods than he can find a ready sale for, and exchanges them for houses or land, not only abuses his credit, but does his creditor great injustice and great injury. In consequence of this system of credit, facilities are offered to engage in mercantile life which many accept who are either incapable of conducting any business successfully, or who attempt to carry it on in locations already full, and this is another abuse of the system.

But another way in which the system is used is by far the most disastrous of all, and that is, in helping on great speculations which dishonest men contrive. For instance, an individual with a moderate capital may commence business in some thriving town, he will visit one of our wholesale establishments, and with his good references, but particularly with his money, he will contrive to become favorably known. He will confine himself at first to one house, but by managing his funds adroitly, he will soon extend his acquaintances. For a time he purchases with caution, pays promptly and succeeds. He enjoys the reputation of a man of promptness and capital, and of one doing a staving business. His acquaintance is sought; he is encouraged, consulted, and flattered; everything goes on finely for a while, but at last he buys largely, goes in beyond his depth, makes one grand splurge, and then judiciously and profitably goes up. Set it down, that the farmer or mechanic, who buys beyond his available means is a bad customer; and the merchant, who is continually selling at cost or under, in order to sell more goods than his more judicious neighbor, is a bad customer; and the dealer, who buys goods to make a show with, is a bad customer. Any man, who does business, entirely on credit, is a bad customer, and finally the man, who does not own at least one-half of his stock in trade, is never a safe customer.

WHAT BECOMES OF WEALTH ?

A boot and shoe dealer has hanging in his store a pair of boots worth \$7. They constitute a portion of his wealth, and a portion of the wealth of the world. A man buys them and begins to wear them; by friction against the pavements little particles of the leather are rubbed off, and thus separated from the rest of the sole. Every particle that is thus removed takes out a portion of the value

of the boots, and when the boots are entirely worn out, the seven dollars of wealth which they formed is consumed. The wheat, corn, &c., which was raised by our farmers last summer is being eaten up. No particle of matter is destroyed by this process, but the value which was in the grain is destroyed.

As, while men are wearing out clothing and eating up food, they are generally busily employed in producing wealth of some kind, the wealth of the world is not usually diminished by this consumption, but it is changed. This applies, however, only to personal property; town lots and farms generally retain their value, but the personal property is in a state of perpetual destruction and renewal. As the several particles of water which constitute a river are forever rolling away to the ocean, while their places are being supplied from the springs and fountains, so the movable wealth of the world is constantly being consumed to gratify human wants, and constantly being renewed by the restless activity of human industry.

CENTRAL HEAT OF THE EARTH.

The rate of increase of heat is equal to one degree of Fahrenheit for every forty-five feet of descent. Looking to the result of such a rate of increase, it is easy to see that at seven thousand two hundred and ninety feet from the surface the heat will reach two hundred and twelve degrees, the boiling point of water. At twenty-five thousand five hundred feet it will melt lead; at seven miles it will maintain a glowing red heat; at twenty-one miles melt gold; at seventy-four miles cast-iron; at ninety-seven miles soften iron; and at one hundred miles from the surface all will be fluid as water—a mass of seething and boiling rock in a perpetually molten state, doomed possibly never to be cooled or crystalized. The heat here will exceed any with which man is acquainted; it will exceed the heat of the electric spark, or the effect of a continued voltaic current. The heat which melts platina as if it were wax is as ice to it. Could we visually observe its effects, our intellect would afford no means of measuring its intensity. Here is the region of perpetual fire, the source of earthquake and volcanic power.

COATING IRON WITH INDIA RUBBER.

A peculiar method of coating iron with India rubber and vulcanizing it has been patented by T. D. DART, of London, whereby plates of iron so treated may be employed for ship-building, and have a most permanent and impermeable surface. The surface of the iron is first secured bright with diluted sulphuric

THE BOOK TRADE.

—"The Merchants' and Bankers' Almanac" for 1861 has been published at the office of the *Bankers' Magazine*, in an octavo volume of two hundred pages, with an elegantly engraved frontispiece by the American Bank Note Company, with the heads of the following merchants and bankers:—1. George Peabody. 2. Stephen Girard. 3. Albert Gallatin. 4. Erastus Corning. 5. David Leavitt. 6. John Richardson, President Bank of North America, Philadelphia. 7. James M. Ray, of Indiana. The contents of the volume are as follows:—

1. A List of the Banks, arranged Alphabetically, in every State and City of the Union, January, 1861—Names of President and Cashier, and Capital of each.
2. A List of Private Bankers in Three Hundred and Fifty Cities and Towns of the United States.
3. Alphabetical List of Sixteen Hundred Cashiers in the United States.
4. List of the Banks in Canada, New Brunswick, and Nova Scotia—their Cashiers, Managers, and Foreign Agents.
5. Governor, Directors, and Officers of the Bank of England, December, 1860.
6. List of Banks and Bankers in London, December, 1860.
7. List of Bankers in Europe, Asia, South America, Australia, West Indies, etc.
8. Lowest and Highest Quotations of Stocks at New York, each Month, 1860.
9. History of the Mint of the United States, and Statistics of the Coinage.
10. Quotations of Foreign Exchange at New York, each Month, 1860.
11. The Usury Laws and Law of Damages on Bills, of each State in the United States.
12. The Banks of New York—Names of President, Vice-President, Cashier, and Notary.
13. On the Progress of Bank Note Engraving in the United States.
14. Historical Sketch of Early Banking in the United States.
15. The Cotton Crop of each Year, and Foreign Exports, 1857–1860.
16. Dictionary of Commercial and Financial Terms.
17. Portraits and Biographic Sketches of Albert Gallatin—Stephen Girard—George Peabody—Erastus Corning—John Richardson—David Leavitt—James M. Ray.
18. Railroads of Each State—Length, Cost, etc.—December, 1860.
19. The Banking Systems of Europe—France, Germany, Austria, Russia.
20. Table of the Values of all Foreign Gold and Silver Coins in the United States. One volume octavo, paper covers. Price \$1 25. The engravings are in the highest style of art. They are not only admirable portraits of the eminent originals, but are executed in a style that reflects the highest credit on the enterprising publisher, as well as upon the character of American steel engravers.

2.—*The Works of Francis Bacon*, Baron of Verulam, Viscount St. Albans, and Lord High Chancellor of England. Edited by JAMES SPEDDING, M. A., of Trinity College, Cambridge. Vol. xiv., being vol. iv. of the Literary and Professional Works. 12mo., pp. 422. Boston: Brown & Taggard; also for sale by E. French, 53 Cedar street, New York.

It is with pleasure we note the progress of this superb edition of the literary remains of Lord Bacon, by the enterprising publishers above. In the present volume, which is volume four of his literary and professional works, is included

3.—*The American Almanac and Repository of Useful Knowledge for 1861.* Boston, 1861.

Part I. contains the Astronomical Department, which has been prepared by Mr. GEORGE P. BOND, the Director of the Observatory at Cambridge, an interesting paper on Meteorology by Professor LOVERING, of Harvard College, and an elaborate and exceedingly valuable article by Dr. MORRILL WYMAN, of Cambridge, on Pleuro-Pneumonia, etc. In Part II. will be found the usual amount and variety of valuable knowledge in relation to the complex affairs and details of the General and State Governments. There are tables giving the weight, fineness, and value of foreign gold and silver coins; prices of beef, pork, and nine other articles, at New York, for forty years; railroads, telegraphic and submarine telegraph lines; colleges and professional schools; an abstract of the population tables of the eighth census (1860) of the United States, with the federal representative population, and the representatives to which each State will be entitled for the next ten years, with the gain or loss of each State, etc., etc., and the members elect to the thirty-ninth Congress, etc. The lists of the executive and judiciary of the several States are given, corrected to the latest date, and full details respecting their finances, schools, and charitable and correctional institutions; and the European portion is especially full. Price \$1, and sent by mail free of postage.

4.—*Fibrilia; A Practical and Economical Substitute for Cotton, with Illustrations from Microscopic Examinations.* 16mo., pp. 260. Cloth bound, price \$1 00. Boston: Crosby, Nichols, Lee & Co.

This new work gives a full account of the patented process by which flax, hemp, jute, China grass, and various other plants capable of cultivation throughout the United States, may be converted into an article superior to cotton, and profitably sold at a far less price than that famous staple has averaged for the last thirty-two years.

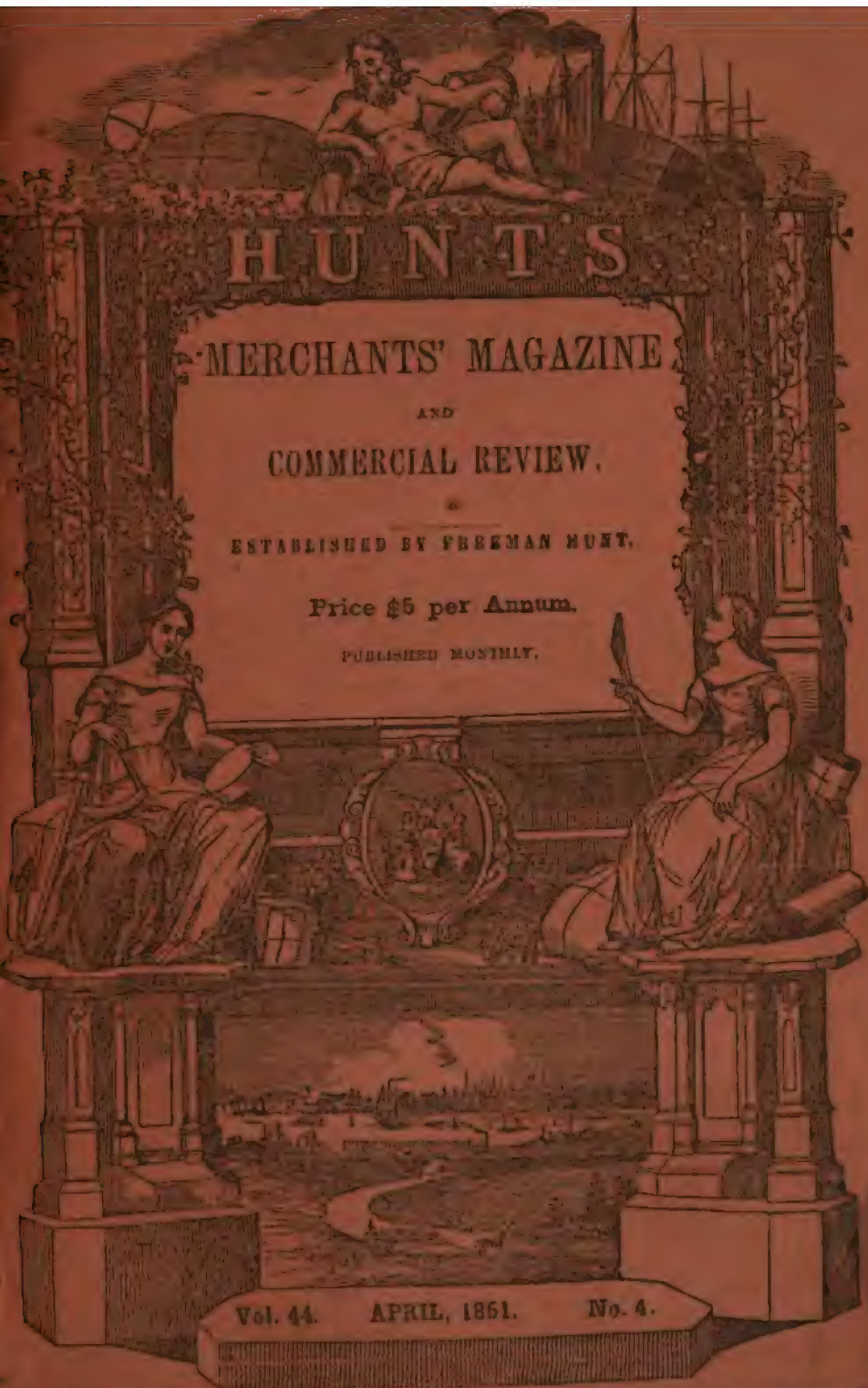
5.—*A Practical Treatise on Banking.* By JAMES WILLIAM GILBART, F. R. S., late General Manager of the London and Westminster Bank. A new Edition, with a View of American Banking Systems and Statistics, to 1860. By J. SMITH HOMANS, Editor of the "Banker's Magazine," etc., and Author of "Cyclopedia of Commerce;" to which is added "Money," a Lecture by HENRY C. CAREY. One Vol., 8vo., pp. 553. Price, \$3 00. Sent by mail free of postage to any part of the United States. Boston: 1861.

The previous edition of Mr. Gilbert's work has been out of print for some years. The present edition contains all that was in the former, with some recent bank statistics of the several States. The additional matter is as follows:—Banking in the United States; Banking in Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, (including a full copy of the Free Banking Law of Pennsylvania, approved March 31, 1860;) Delaware, Maryland, District of Columbia, Virginia, North Carolina, South Carolina, Georgia, Florida, Louisiana, Mississippi, Arkansas, Texas, Kentucky, Tennessee, Missouri, Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa, Minnesota, California.

6.—*Money; a Lecture delivered before the New York Geographical and Statistical Society.* By HENRY C. CAREY.

7.—*Bruin; the Grand Bear Hunt.* By Capt. MAYNE REID, author of "The Boy Hunters," "The Young Voyageurs," "Odd People," &c., &c.

Is another one of Captain Reid's entertaining story books for the entertainment of young people, which we have no doubt will be duly appreciated by the juvenile class who love stirring adventure, told in the real Baron Munchausen style.



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To whom all Subscriptions for the past volume or volumes, and for the current and future volumes
of this work should be addressed.

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The last year was one of marked prosperity. Number of policies issued 891 more than the year previous. Net income \$140,000; an increase of \$23,000. The addition to the accumulated fund, \$364,880; an increase of \$121,000. The Company has paid during its existence (17 years) nearly a MILLION in Losses; almost a MILLION in cash dividends to policy holders; and have nearly TWO MILLIONS well invested in most losses. Economy, care in its risks, and prudent investments characterize this Company. The Mutual Principal figures at the lowest possible rate; the surplus being returned dividends *pro rata* to all insured. Documents of an interesting character, showing the benefits of the Mutual, plan forwarded gratis, upon application to

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110 Broadway, (corner of Pine-street,) New York.

See last report at the end of this Number.

NOTICE TO SUBSCRIBERS TO THE MERCHANTS' MAGAZINE.

The Undersigned, for three years Publishers of the MERCHANTS' MAGAZINE, have sold this Work, and all our Right, Title, and Interest therein, to Mr. WILLIAM B. DANA, late of Utica, New York, to whom only all Letters, Communications, and Remittances for the Work should be addressed.

GEORGE W. & JOHN A. WOOD.

New York, February 14th, 1861.

NOTICE TO THE SUBSCRIBERS TO THE MERCHANTS' MAGAZINE.

In assuming the publication of THE MERCHANTS' MAGAZINE, the undersigned gives notice to the subscribers that there will be no essential change in the features of the work. It will, however, be the object of the Proprietor not only to sustain its previous character as a record of sound political economy and of commercial statistics, but to add the following desirable information:—

I. A record of the proceedings of the Chamber of Commerce, New York, and of the Boards of Trade at Boston and Philadelphia.

II. A monthly list of Marine Losses, showing the name of the vessel, where bound, names of owner, captain, &c., and amount of loss, whether total or partial.

III. A copious digest and careful examination of all important decisions in New York and other States, in reference to Marine, Fire, and Life Insurance, Commercial Points, &c.

IV. A monthly letter from London, giving a synopsis of current commercial affairs throughout Great Britain and Europe, with such other information as will render the work acceptable to its readers.

WILLIAM B. DANA,

Proprietor of the Merchants' Magazine,

No. 61 William Street, Chamber of Commerce and Underwriters' Building.
New York, Feb. 14, 1861.

THE MERCHANTS' MAGAZINE.

Established July, 1839.

EDITED BY

J. SMITH ROMANS, (SECRETARY OF THE CHAMBER OF COMMERCE OF THE STATE OF NEW YORK,)
AND WILLIAM B. DANA.

VOLUME XLIV.

APRIL, 1861.

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APRIL, 1861.  
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SYSTEM—INCONGRUITIES. III. INTERNATIONAL CODE OF THE AMERICAN SANITARY CON-
VENTION. IV. DUTY OF LEGISLATION.

TRADE and commerce have their difficulties as well as their successes. The winds and waves are their constant enemies. While freighted with treasures, our ships sometimes bring pestilence, and the rich returns of enterprise are accompanied by infection and death. The diseases of tropical climates lurk among the bales and boxes taken on board, to break forth mortally at the moment, perhaps, when the destined port is in sight. Nor is this all. Death follows the unhappy victims of infection into the crowded harbors in which the anchor drops; spreads from the few to the many; from the sickly crew on board, to the dense population on shore. In a few hours, perhaps, the marine hospitals are filled with the dying; the city catches the pestilence; the bills of mortality lengthen; alarm pervades the public mind; the counting houses are closed; hearses are the only vehicles in requisition; whole districts are fenced off from the general use; and dismay and sorrow spread a funeral pall over the once busy scene.

Is it any wonder that, against such ravages, humanity or self-protection, or both, should seek some such safeguard as that of the quarantine? Is it strange that, from the earliest days of regular commercial intercourse by sea and land, strenuous efforts have been made to avoid the communication of contagious disorders, incidental to the climates from whence have come the richest of national products, or that restrictions of the severest character, at first those of undisciplined fear, or pitiless ignorance, should have been adopted in the early maritime States?

For four hundred years an unenlightened legislation has dictated the codes by which the evil was sought to be averted, and it is only now, within a few years past, that the subject has been successfully grappled

by the hand of science, and in the light of a careful inquiry. We have unquestionably arrived at the solution of its difficulties, as far as practicable by human wisdom, and the two-fold effort to prevent the approach of pestilence, and to disarm it upon its arrival, has not been made in vain. We feel assured, from an actual experience, that we can check its ravages, disarm it of its terrors, and diminish the number of its victims.

A retrospective view of the subject may prove interesting to those of our readers, whose lives and property have been, or may hereafter be, lost or saved by a badly or a well regulated quarantine.

It may be defined, says a competent authority, as an "interruption of intercourse with a country in which a contagious disease prevails, or is supposed to prevail, and in the employment of precautionary measures respecting men, animals, goods, and letters otherwise communicating with it." The particular designation was given it, because these precautions were usually adopted for a period of forty days, modified in modern times to shorter periods according to circumstances, varying with the character and crises of the disease to be guarded against. The system owes its origin to the Milanese and Lombardians, who, in the latter part of the fourteenth century, began to be intimidated by the frequent ravages of the plague, which desolated a great part of Europe, was introduced from the Levant, and was the attendant and evil genius of the lucrative commerce which enriched the Italians. The regulations adopted for its prevention were of a very severe character, the principal object of them being to guard against any intercourse with the infected. Those suffering from the disease, were usually carried into the open air and left there, to die or recover as they might. Capital punishment and confiscation of property were, in 1374, the penalties for the violation of the laws, and in 1383 the sick were not permitted even to enter the country. The authorities differ somewhat as to the original date of the institution of quarantine itself, but nearly all agree as to the establishment of a sanitary council or magistracy in 1475, by the Venetians, (*Sopra la Sanita*.) to whom the prevention of infection was specially entrusted by the State. This consisted of three nobles, but their powers were not, however, found to be sufficiently large to prevent the introduction of the disease. They were accordingly enlarged to the extent of authorizing the council to imprison, and even put to death, without appeal from their decision, those who violated their regulations. Lazarettos were established on two islands, and there a rigid inspection took place of the crews which entered the port, and the letters of health from the places of departure were scrutinized. Venice, therefore, deserves the credit of the first practical treatment of the subject, if it has not of the origin of the institution itself. These quarantine arrangements were soon generally adopted by other countries, and have been continued down to our own times. Those who are curious to examine into the early history of the theory and prevention of contagion, may consult the writings of Dr. William Brownrigg, a learned Englishman, who, about the year 1771, when the plague reappeared in Europe, published his views on the communication of pestilential contagion, and of eradicating it in infected places. In this he treated the subject in a masterly manner, and he is good authority even now. It is not an uninteresting fact, that he was a friend of Dr. Franklin, and with him and Sir John Pringle, made the celebrated experiments on Derwent

Lake, of calming the roughness of water by coating it with oil. Dr. Richard Mead is another English authority, who, during the alarm of plague at Marseilles, in 1719, at the request of the Secretary of State, gave his opinion to the government, as to the best method of preventing the spread of the disease to England, and his views were engrafted upon the quarantine system of that time. To yet another, John Howard, whose name is dear to philanthropists, we are indebted for important information on the subject of contagion and quarantine. In the year 1785, from motives of well known benevolence, he set out to visit all the lazarettos in Europe, not even taking a servant with him, lest it might expose him to the danger which he incurred himself. Passing through the south of France, Italy, Malta, Zante, Smyrna, and Constantinople, he incurred frequent risks of contagion, and at Smyrna, on his return, voluntarily submitted, for the purpose of observation, to the restrictions of its quarantine laws. The results of this remarkable journey were embodied in a book published in 1789. It was his misfortune finally to perish a martyr to his zeal. In a subsequent visit to Russia, while passing through Cherson, which was afflicted by a pestilential disease, he caught a fever from a young lady on whom he was invited to call during her illness, which caused his own death.

There are many curious historical facts connected with the history of quarantine, and some old German and Italian authorities, in relation to it, are quoted by Beckmann in his *History of Inventions*. They are not, however, of much value to us for our present purpose. One thing, however, is noticeable, that the first systematic attempts at quarantine regulations were owing to commercial rather than medical influences. They have from age to age spread themselves over the civilized world, and are now probably on the eve of assuming a universal international character.

New York is of course deeply interested in this subject. Such are the preponderating influences of its locality, its capital, its population, and its command of the vast trade of the interior, that it is now, and probably ever will be, the first and greatest city in the Western world. It is a model already in its public institutions, and must for these, as well as other reasons, continue to be the greatest Western mart for the sale and exchange of European and tropical products. There are sagacious merchants yet alive who did business here when the population of the city was but 70,000. It is the opinion of some of these that at the close of this century it will be several millions. The sanitary condition of such a city, and such a port, assumes, therefore, a magnitude scarcely to be appreciated, and the movements of our sanitary conventions are admissions of the sense of the responsibility upon us already. To our medical friends we owe the highest obligations for what they have thus far done to enlighten the public mind, and to give proper direction to the public authorities in relation to these subjects. When they speak, we should listen with respect and confidence. We are disposed to give them precedence in the column of sanitarians, and conceive it our duty to follow closely in their support, to give them the influence of capital and the suggestions of commercial experience. At the same time we expect them to remove, as fast as practicable, the formal restrictions which that experience has taught us are unnecessary and obsolete. We are fortunately aided in these views by the recent action of the French and English authorities, and by recent assemblages of eminent men of our own country, who have

taken up, and pronounced with almost entire unanimity, upon all the sanitary questions raised, either in our halls of legislation or Chambers of Commerce.

Whatever differences of opinion prevailed formerly among our eminent medical men, whatever deference was due to such writers as Rush and Hosack, the present advances in therapeutics enable practitioners of the present day to modify even the most celebrated opinions. European writers we must also remember had reference to the visits of the plague, and this was in their mind in all their disquisitions on the subject of quarantine. Yellow fever, or bilious remitting fever, black vomit, or Bulam fever, is classed among the remittents, accompanied by a yellowness of the skin, with vomiting of a black or dark brown fluid, these being invariable attendants of the disease. In from 24 to 48 hours the symptoms run on until the powers of life sink to the lowest ebb, with weakness and intense pain in the head, eyes red and fiery, the mouth parched and dry, the pulse at first frequent, and then imperceptible or intermittent, full, and hard, the skin hot and dry, the discharges from the kidneys high colored and tinged with bile. Bleeding frequently from all the passages, hiccup and vomiting, mark the sad changes and close the scene. The mortality occasioned by its visits is enormous, equaling, if not surpassing, that in cases of cholera. It is wholly unknown in England, while in the United States and the West Indies it is a frequent and frightful visitor. It seems to be as appalling as the plague itself. But is it infectious, and does it only communicate itself by contact of person, or through local miasma, or animal and vegetable substances, or in assuming the form of articles of merchandise? And is it like the plague in any respect, which has been, and is yet, at the bottom of the inquiry in Europe and Asia, as well of the medical precautions which have originated there? We must not forget this distinction when we come to the one consideration of infection. It may be that we have been led away from the right precautions in the one case, from this assimilation of the two diseases.

When we quote Segur Dupeyron, on the subject of quarantine, one of our latest and most estimable authorities, we must remember that it is of the plague he speaks. This is a violent and malignant contagious fever, marked by eruptive pustules of a white, livid, or black color, together with buboes or carbuncles. The fever is of a typhoid character, swellings show themselves in the groin and armpits; persons attacked with it stagger and fall, and death by exhaustion often occurs in a period of twelve hours. It is peculiar to Asia and Africa, and its haunts are especially in Malta and Smyrna. Bearing these facts in mind, we at once see that yellow fever, be what it may else, is not the plague, and the regulations which would be proper in relation to the one, may not necessarily be imperative in the other. On the other hand, though there be a great difference in their character and treatment, there is a general principle common to both, that cleanliness, air, and wholesome diet are remedial or rather preventives, and auxiliaries in both cases.

The question, whether either one or the other can be communicated by personal contact, is not yet absolutely determined. Opinions vary, yet all agree that atmospheric causes, such as foul air, damp exhalations, filth, unremoved dejections, and soiled clothing, in connection with personal contact, may reproduce the disease in others. Even animals are believed to be able to communicate the plague, and they are placed under

quarantine in the ports of the Mediterranean. Inanimate objects are supposed in many cases to be capable of communicating it, and, therefore, have been taken into consideration in all quarantine regulations, and divided into two classes, susceptible and non-susceptible. The former include wool, silk, and leather, cotton, linen, paper, and various other vegetable substances; the latter are such as wood, metals, and fruit. By reference to the English quarantine laws, we find the enumeration more extended.* The distinction itself is by some deemed fanciful. At Malta it is maintained, that the parties employed to cleanse or depurate susceptible goods, have never been known to catch the infection themselves. But with regard to yellow fever at our own quarantine station, it is asserted that the same class of operatives have sickened and died after merely washing the clothes of the sick. Dupeyron himself admits that the clothes and bedding of plague patients have transmitted the disease to others.

In France particularly, through the writings and exertions of eminent medical men, the quarantine system has been greatly relaxed. In 1847, 1849, and 1850, various restrictions were removed, and finally, the proposition of Dupeyron for a general convention of the governments interested, to agree upon a uniform system of quarantine regulations, was in 1850 adopted. At Paris in that year delegates from France, England, Austria, Spain, the Two Sicilies, the Roman States, Greece, Portugal, Russia, Tuscany, and Turkey united in framing an international code on the subject, which is now observed in all the Mediterranean ports. The local system in England has also been the subject of much discussion, and the measures proposed by the general Board of Health have had an important reference to the destruction of the sources of infection, the *fomites* so called, and the application of the remedies of good air, water, ventilation, and food, as being more positive than the old restrictions, or recourse to any pestilential traditions.

Since the great movements abroad, we have witnessed corresponding ones at home. Sanitary conventions of a national character, already alluded to, have been held for several successive years past, at which the nature of quarantine regulations has been particularly subjected to inquiry and discussion, and we are no longer in the dark with regard to what are either the duties of legislation or the interests of commerce. The American view admits the necessity of a code to prevent the introduction of yellow fever, cholera, typhus fever, and small pox, the former being peculiar to our locality, from its proximity to the West Indies and South American ports, and being more frequently and fatally dangerous to our commerce than the others, certainly always a source of greater alarm. The other diseases named, are not necessarily the result of importation; the yellow fever is doubtless always so.

At a meeting of one of these conventions, held in Boston in June of last year, this international code for the regulation of quarantines, was introduced, and its authors proposed that it should be tested by at least a trial of five years, if it was possible to bring that about. The want of space will not permit us to do justice to this able document, but its principal points may be briefly stated, for the benefit of those who may not meet with the original itself. They presented considerations—1st. Of

* The list of suspected articles is a very large one, though arranged on the same principle.

the defects relating to the sick and sanitary protection, such as exist in the hospitals, their location, construction, and fitness; the facilities for the reception, distribution, and care of patients; the construction and management of docks and warehouses for quarantine purposes, with reference to sanitary protection. 2d. The deficiencies relating to commercial transactions, and public convenience, such as the needless delays of cargoes, the damage done them at quarantine, the inconvenience and expense of lighterage, the loss of time, and the use of vessels.

These two divisions are so comprehensive and well considered, as to suggest nearly all the details of a perfect system. They imply the most thorough arrangements for the care of the sick, with the least danger to the public; the most ample facilities for warehousing goods, and cleaning of vessels and infected cargoes, and docks and wharves at which the sick, and the freight itself, may be landed conveniently in all weathers, and along side; and external police regulations, by which proper medical treatment may be maintained, and commercial interests protected. The report was accompanied by the recommendation of specific measures to carry out these principles. The construction of ample and safe warehouses, quarantine docks, and marine railways, and these isolated from populous places, are warmly recommended, so that passengers, crew, ship, and cargo, may be taken care of with the least inconvenience, and at the least expense.

The same enlightened convention prepared a code, somewhat like the English, for the regulation of quarantine, as respects the departure and arrival of vessels, comprised in sixty-four sections, which apply to every possible contingency, and which recommend themselves to universal use. Our want of space compels us to forego the consideration of the details of this part of the code. They are to be found in the printed debates of the convention, published by Rand & Avery, Boston, 1860, and in a separate pamphlet, for convenience of examination.

From this brief analysis of our subject, it is apparent it is one of the very first importance, particularly to the city of New York. At this moment, we regret to say, our quarantine system is incomplete. The destruction of the old station at Staten Island, the general feeling prevailing there that it is neither just nor expedient to intrude upon its rapidly increasing population any further risks of infectious diseases, any more than it would be to do so at the Battery; the temporary experiment of the floating hospital, the difficulty of obtaining a new site, and the consequent inconvenience existing in the present arrangements, make the whole question one of difficulty. The Legislature is the only power which can place the system on a proper footing, and it is to be hoped it will avail itself of the assistance of science and experience, and fully consult the necessities of our trade and commerce.

Let us briefly consider what are the legal provisions for the regulation of our present quarantine system. The existing statutes are a condensation and an enlargement of all the previous laws, including those of the Colonial times, for protection against foreign infectious diseases, by no means harmonious in their operations, or even their design. They are founded on the principle that pestilential and contagious diseases are brought to this city from foreign and sometimes domestic ports—more particularly in certain parts of the year, and therefore it is provided that be-

tween the first days of April and November, vessels coming from places where such diseases existed, or having on board any such diseases, shall be subject to quarantine, and its usual regulations. These are carried out under the control of two distinct bodies—a binary compound of authorities, and yet with separate powers, independent, yet correlative, viz:—the Board of Health and the Commissioners of Health; an arrangement which permits, and has, accordingly, sometimes led to a conflict of jurisdiction, by no means advantageous to the public welfare. As a means of official patronage, and a multiplication of officers and salaries, the system probably meets the particular views of those by whom it has been patched up, and for whose benefit it is retained in its present shape. The Board of Health consists of the Mayor and Common Council, where ten members compose a quorum, and the Mayor presides. The other is a kind of concurrent board, which is composed of the President of the Board of Aldermen, the President of the Board of Assistants, a Health Officer, a Resident Physician, a Health Commissioner, and a City Inspector, and the members are styled the Commissioners of Health. It would seem as if they were a board advisory to the other, in all matters regarding public health. The Health Officer has the immediate duty of inspection, being required to visit the vessels coming in port during the period named, between the hours of sunrise and sunset, to inquire into the health of those on board, to examine them, if necessary, under oath, and to report in writing, either to the Mayor or Commissioners of Health. He has power to remove dangerous vessels to any place outside of the quarantine buoys, and inside of Sandy Hook. He has charge also of the depuratory, or cleansing processes; may, if he thinks best, order the destruction of bedding or clothing, and prohibit persons from leaving the quarantine grounds for fifteen days from the time of the occurrence of the latest case of disease. With the approval of the Mayor, or the Commissioners of Health, he may permit the cargo, or any portion thereof, to be conveyed to the city; he may prescribe vaccination, confine arrested fugitives from the grounds for ten days, and pass over indigent emigrant patients, when recovered, to the care of the Commissioners of Emigration. Not only these, but he may be required to execute other duties, as may be assigned him by the Board of Health, and the Commissioners of Health, both, or either of them.

Vessels subject to detention may be kept under surveillance for thirty days, or twenty days after the discharge of their cargoes, or as much longer as the Health Officer, and the Mayor and Commissioners of Health, may determine, unless the same Health Officer, with their assent, shall grant permission to proceed.

The Mayor, when acting with the Commissioners of Health, as he is authorized to do, is to advise (himself) the Mayor, and the Board of Health, in all matters regarding the public health; a duty which implies a duality of persons, as well as power. The statutes also provide a Resident Physician, who is to visit the sick, and report to *either* board; and the Health Officer is also to assist him, under the direction of the Board of Health.

The Mayor, besides the two-fold authority committed him, exercises a third. He has power alone to issue his proclamation, declaring what ports are infected, and within the purview of the statute, and also the

duration of the necessary quarantine. But the Board of Health alone, has the power to regulate the internal intercourse between the city of New York and an infected place, by land or water, and dispose summarily of those who violate its regulations. There are some other features in the system, which are commendable enough. Vessels may be removed, cargoes in whole or in part disposed of; goods that have improperly found their way into the city, may be returned to the vessels from which they came, or to the quarantine store-houses; cargoes may be re-exported, in whole or in part; may be transported up the North or East River, not approaching within two hundred yards of the wharves; and sick persons, charged with offences against the United States or State, may be held in confinement until their restoration to health.

With the exceptions referred to, the regulations, in these and other particulars, are ample for the security of the public, but it is evident that the power of enforcing them is divided among too many officials; that unity of purpose is scarcely to be expected; that concert of action necessarily is often impossible, and there may be, at the most critical moments, a fatal conflict of jurisdictions.

It is, beyond all question, that legislation cannot be expected to provide for the contingencies which arise out of peculiar cases, or unexpected circumstances. Thus, we should not expect it to control the varying practice of the hospitals, nor give its authority to any particular medical specific; but it may, most certainly, provide for a responsible, simple, and efficient execution of the restrictive measures necessary to prevent the entrance and spread of infectious diseases. It is not supposed that the statute shall discuss the nature of cholera, or venture upon deducing at what time of the year it may come in without challenge; nor ignore ship-fever during the winter, its favorite season; nor small-pox, which has no limit in its career, or time of advent; but we certainly may demand that the administration of the quarantine laws shall be placed in the hands of a single board of competent persons, with a direct responsibility, either to the city or the State. A selection of distinguished medical men, of equal number, by the Governor and the Senate, sufficient to protect the interests of the State, should certainly be made. A board thus constituted, would be efficient and responsible; could act with readiness and energy, and would be free from the corrupt influences which prevail so frequently in our municipal affairs. It is to be hoped that the trust would be confided to the highest order of capacities.

At present, as we are situated, there are apparently conflicting interests, views, and results. A humane institution becomes the scene of political squabbles, and the interests of commerce are endangered by the demands of hungry office seekers. No matter what party is in the ascendant, the quarantine is one of the placers for which there is the sharpest "prospecting."

With regard to the location of our marine hospital, and what should be the character of a new lazaretto, it may be well to make a few suggestions. It has, in times past, been located on various islands in our harbor, and the last one, in itself, and in point of convenience, seems to have been the best. What is now due to the wishes and interests of the rapidly increasing population of Staten Island, may be left to be considered by those to whom the question properly belongs. Our quarantine station, in itself, has never yet been one of the first class, and, in

point of convenience, will not compare with those of Marseilles, Leghorn, or Genoa, though far superior to any in Great Britain. It is the opinion, as it was the recommendation, of the National Sanitary Convention, to which we have alluded, that wet docks, marine railways, and ample warehouses, should be provided, as indispensable to the cleansing of ships and cargoes, as the hospitals are for the sick themselves. There can scarcely be a doubt of this. A vessel quarantined at anchor, presents numerous difficulties in the performance of the duty of inspection, depuration, and discharge, punctually, in good as well as bad weather; and remedially, in its requiring such services and labor on board, as may increase, or at least retain, the infection already there. An infected vessel, in dock, and properly secured, can easily, and without disadvantage to the owners, be subjected to the process of cleansing and repairs.

To prevent injury in the treatment of such parts of the cargo, classed as susceptible of infection, spacious warehouses, well ventilated and secured, are indispensable. In the English system, there is scarcely anything like a true lazaretto. A floating hulk is the best substitute it has to offer, and yet its quarantine code, assuming its present form from the enactments of George IV., (6) and subsequent orders in Council, is one of the most carefully theorized of any, except that referred to, within our knowledge. Down to the method of depurating infected goods—to the very manner of opening, handling, and airing suspected bales and boxes, it is complete. In a recent work of Beadell, on the Maritime Code of England, the fullest and most interesting details are given; and this, too, although the worst inroads of infection, such as the plague and yellow fever, are foreign to its shore, and seem not even probable ever to occur. It is worthy of note that the quarantine stations in Great Britain are not necessarily immediate to every port which they are designed to protect. There are not more than a dozen of them for all its ports of entry. White Booth, between Hull and Grimsby, is the station for Hull, and twenty-two other places. For London, Rochester, and Feversham, is Standgate Creek, an inconsiderable affair. For Liverpool, and seven other places, including the Isle of Man, is Bamboropool, or Milford Haven. For the western coast of Scotland, comprehending Glasgow, Greenock, and nine other ports, the station is at Holy Loch, in the Frith of Clyde. Thus showing, perhaps, that general considerations have an influence above those of the personal interests of owners, or the direct advantage of the ports themselves. At a day not far distant, perhaps, some unobjectionable locality may be found, where, on a large and liberal scale, the improvements effected by the progress of science may be turned to our own account. We think we may lay down one principle, in regard to the one contagious disorder which we principally regard with apprehension, which should not be lost sight of, in whatever we do hereafter:—Yellow fever must not be permitted to nestle in any confined spot. It is doubtful whether even more than one case should be treated in the immediate vicinity of another. In a pure air, by itself, and unsustained by accumulating materials for propagation or growth, it is believed yellow fever is not communicable. This appears to be the latest opinion of leading physicians, and should it not be strictly correct, there can be no doubt that its force must be diminished in proportion to the diminution of its causes. And though the application of steam, as proposed

by Dr. Harris, while in direction of the floating hospital in our harbor, in 1859, to the cleansing of all suspected and infected articles, seems to have resulted in the destruction of their *fomites*, and the preservation of more than average health on board of the vessels where it was used, yet there can be no doubt its auxiliary influences would not be less valuable, if exerted in a purer atmosphere on shore.

The conclusion to which we ourselves have arrived, after consultation with leading commercial men—after a careful examination of the subject itself, and without the least bias in favor of any theory, or any proposition bearing upon it, is, that the restrictions which are placed upon commerce, in the fear of contagion, should be as light as public security will permit. The only real invasion we in New York have to fear, of this description, is the yellow fever, but its visits are unfrequent, and its terrors are diminishing under the scrutiny of modern science, and the test of experience. But it must not be left to be met by presumptions, nor can it be excluded by mere political cordons; nor should the care of the public health be the reward of partisanship, or be held up as the prize of individual turbulence, or truculency. Whatever power legislation may give to any Board of Health, should be lodged in the hands of purely scientific and philanthropic men. There should be a magnanimous disregard, on the part of our law makers, of all political considerations in the framing of the statutes which regulate the administration of our sanitary code. They should be without secret clauses, paragraphs for individual advantage, loopholes for expenditure, or chances for adherents. Life and death, the business of the port, the facilities of commerce, and the protection of the people, should be present in the minds of every committee, and every representative, undertaking to grapple with pestilence. Our present system is conflicting and contradictory, and never will work harmoniously under various and opposite jurisdictions.

The Board of Health, one of the quarantine departments, is but rarely called together, and for the understood reason, that the authorities by which it is called, have been actually afraid that its services would be uselessly prolonged.

A system we should have without these objections, and we are now fully prepared to adopt one with less machinery, and less inducement for abuse. It is hoped there are single minded and patriotic men at the seat of government, in number enough, to give us one which shall meet every exigency, with economy, skill, promptness, and simplicity. Contagion is not an article in which there should be invested any political capital. Let the hireling get his reward "at the barn door of the treasury," but let him keep his hands off the sick and the dying; let him ply his trade in some other form, than that of piracy on board the luckless merchantmen who come into port with the flag of death in their shrouds.

COMMERCIAL CHRONICLE AND REVIEW.

POLITICAL FUTURE—EVENTS DEPRESS ENTERPRISE—EXTERNAL COMMERCE—EXPORTS PAID IN SPECIE—COTTON AND BREADSTUFFS—GOLD IN LONDON—PARALYSIS OF COMMERCE—BANK OF ENGLAND—LESSENED MARKET FOR MANUFACTURES—NEW YORK BALANCES—INTERIOR EXCHANGE—COLLECTIONS—STAY LAWS—TARIFF—UNUSUAL EFFECT—COTTON SPUN—NON-EMPLOYMENT OF HANDS—NO USE FOR MONEY—RATES OF MONEY—BANK DISCOUNTS—SPECIE MOVEMENT—LOAN OPERATIONS—SPECIE IN THE CITY—ASSAY OFFICE—COINAGE OF NEW ORLEANS MINT—UNITED STATES MINT—FOREIGN COINS—AUSTRIAN FLORINS—FOREIGN EXCHANGE—COTTON BILLS—GOODS IN WAREHOUSE—TOTAL SUPPLY—IMPORTS AND EXPORTS.

The general condition of commercial and financial affairs still turns upon the uncertain political future. The fears of civil war, that at one time were entertained in certain quarters, have subsided, if not altogether disappeared, under the influence of passing events; but there are yet no guides by which commercial enterprise can with safety be shaped, and commerce languishes, while money accumulates. The course of the external commerce, as exhibited in the tables customarily annexed, is unusually large in exports of produce, and of unwonted returns in specie, with a continued low range of exchange. The country, a large gold producing one, exports apparently more of its cotton and breadstuffs, than suffices to pay for all the goods it purchases and interest on debts due abroad, leaving a surplus in favor of the country, which is received in specie. This fact marks the paralysis of business, and its effect is to make the market more stringent in London, the great money center of the world, where the rate of interest has been advanced by the bank to 8 per cent. It is there claimed, that while the specie so poured out, is given in exchange for cotton, that being wrought up into goods, is of a better exportable value than the specie itself, and therefore the departure of the specie is not a matter of so much regret; but the departure of the specie is the sign of the loss of a large market for goods, that were formerly sent in the place of specie, and to an extent which brought gold back. Since January 1st, New York has received over \$11,000,000 in specie, and exported to Europe \$3,000,000 less, being a balance of \$14,000,000 against the English goods export market. This change has been wrought, however, as well by the large increased export of produce that comes from the South and West, as by the diminished import of goods, and indicates the current of exchange towards the interior from New York, since the exported produce coming from the interior, is not paid by purchase of goods, as well imported as domestic, to the same extent as usual. The collections of outstanding claims on the West and South, are made with reasonable promptness, and these tend to effect sales of produce, causing money to accumulate at the great reservoirs, without any present prospect of a renewed demand for it in any branch of commercial or manufacturing enterprise.

The action of some of the Southwestern States, in relation to stop and stay laws, has not had much influence upon collections, since honorable merchants settle without regard to them. The following is the tenor of one enacted recently in Missouri :—

Dispatches from Jefferson City state that the governor approved and signed the "Relief Bill," which passed the Legislature some days before. We here insert the bill as matter of record :—

AN ACT TO AMEND AN ACT TO ESTABLISH JUSTICES' COURTS, AND REGULATE PROCEEDINGS THEREIN, APPROVED DECEMBER 6TH, 1855.

SECTION 1. All executions issued upon any judgment rendered by a court of record, shall be returnable to the second term of said court, after the date of said execution.

SEC. 2. All executions now issued from any court of record in this State, shall be returnable to the second term after the date of said writ, as now provided by law.

SEC. 3 All executions issued by Justices of the Peace upon judgments rendered by them, shall be returnable in twelve months from the date of such writ.

SEC. 4. No property shall be sold by virtue of any execution, until within fifteen days of the return day thereof; *provided*, that if the property be personal, the defendant shall give bond for the delivery thereof on the day of sale, at such place as the officer may direct.

SEC. 5. All executions now issued by Justices of the Peace, shall be returnable twelve months from the date of such execution.

SEC. 6. All laws inconsistent with the provisions of this act, are hereby suspended until the 1st day of January, 1862.

SEC. 7. This act shall take effect, and be in force from and after its passage, and shall continue in force until the 1st day of January, 1862.

The tariff, which has become a law, and which is given in extenso in the present number, is of a character, under ordinary circumstances, in quiet times, to have stimulated a very active importation of goods, to come in before its operation April 1st; but also to have caused a demand for capital, to employ in those new manufacturing enterprises that may be called into activity, through the apparent advantages which the new bill holds out. The political aspect of affairs is such, however, as to prevent any action in this direction. The quantity of cotton taken from the ports by the Northern spinners, in the month ending March 15th, was only 41,000 bales, against 80,000 in the same period of 1859, affording an indication of the diminished action of the factories in that branch of manufactures. The non-employment of great numbers of hands in business and industry, has doubtless considerable effect upon the course of trade, since the consumption of goods is no doubt necessarily curtailed. The slow movement of goods, and the difficulty in some branches of collection, have borne heavily upon those who depended upon these resources to meet the spring payments, and the demand for money, as the spring advanced, became more urgent for this purpose, as well as for investment in government stocks which have been issued, and of which a large supply was looked for. The rates of money, comparatively, were as follows:—

	On call.		Indorsed—		Single names.	Other good.	Not well known.
	Stocks.	Other.	60 days.	4 a 6 mos.			
Apr. 15th.....	5 a 5½	6 a 6½	5½ a 6	6 a 6½	6½ a 7½	9 a 10	11 a 12
May 1st.....	5 a 5½	6 a 6½	5 a 6	6 a 6½	6½ a 7½	9 a 10	11 a 12
May 15th....	5 a 6	6 a 6½	5 a 6	6 a 7	6½ a 7½	9 a 10	10 a 12
June 1st.....	4½ a 5	6 a 6½	5 a 6	6 a 7	6½ a 7½	8 a 9	9 a 10
June 15th....	4½ a 5	5 a 6	4½ a 5	5 a 5½	5½ a 6	6 a 7½	8 a 9
Jan. 1st, 1861.	5½ a 6½	8 a 10	10 a 12	13 a 15	18 a ..	.. a ..	.. a ..
Jan. 15th.....	5 a 6	6 a 7	7 a 8	8 a 9	8 a 10	12 a 16	18 a 24
Feb. 1st.....	5 a 6	6 a 7	7 a 8	8 a 9	8 a 10	12 a 15	18 a 24
Feb. 15th.....	5 a 6	. a 7	7½ a 8	8 a 9	8 a 10	12 a 15	18 a 24
Mar. 1st.....	5½ a 6	6½ a 7	7½ a 8	8 a 9	9 a 11	12 a 15	18 a 24
Mar. 15th....	5 a 6	6 a 7	5½ a 6	6½ a 7	7 a 8	12 a 15	18 a 26

The supply of good business short paper, has, in consequence of the small amount of business done, not been large, and the banks have had difficulty in getting as much of that class as their business demands. On the other hand,

the supply of longer paper was more abundant, with, at the same time, more disposition to take that which is first class. The stock movement produced a little more demand for money upon call. The line of bank discounts presented the reverse action from what is usual at this season, and is several millions below that of the corresponding period last year; while their specie is some twelve millions higher, under the continual import from abroad and the receipts from California. That movement has been as follows:—

GOLD RECEIVED FROM CALIFORNIA AND EUROPE AND EXPORTED FROM NEW YORK WEEKLY, WITH THE AMOUNT OF SPECIE IN SUB-TREASURY, AND THE TOTAL IN THE CITY.

	1860.		1861.		Specie in	Total
	Received.	Exported.	Received.	Exported.	sub-treasury.	in the city.
Jan. 5.....		\$85,080	{ 1,482,867 1,388,100*		\$3,645,437	\$28,485,000
12.....	\$1,788,666	88,482	{ 1,446,219 1,400,000*		2,584,455	29,045,300
19.....		259,400	{ 1,693,062 1,246,029		2,166,242	31,764,706
26.....	1,760,582	81,800	{ 1,246,029 1,511,693	22,855	5,751,298	34,720,200
Feb. 2.....	94,596	427,457	{ 1,200,006* 800,000	289,869	4,328,000	35,382,000
9.....	1,476,621	92,350	{ 800,000 1,616,111	115,698	3,644,921	38,300,500
16.....		592,997	{ 1,616,111	117,101	3,356,000	40,475,000
23.....	1,393,179	202,000	{ 855,755	187,253	3,388,700	41,381,000
Mar. 2.....	382,503	667,282	{ 855,755 256,000*	176,161	9,166,030	43,646,000
9.....	1,198,711	115,478	{ 256,000* 3,040,000*	.....	7,524,637	41,417,000
16.....	152,000	429,260	{ 3,040,000* 815,524	123,316	6,720,805	42,940,000
Total.....	8,346,862	3,041,581	18,708,346	1,082,113	...	.....

The largest export of specie has been of doubloons sent back to Havana, whence they came in the fall to strengthen the sugar market. The loan operation of the government caused a considerable transfer of specie from the banks to the government vaults, whence it returned in the regular course of disbursements. The large arrivals from abroad caused great activity at the Assay-office, the operations of which were as follows:—

	NEW YORK ASSAY OFFICE—DEPOSITS.				United States.		Payments in	
	Foreign.		Silver.		Silver.		Bars.	Coin.
	Coin.	Bullion.	Coin.	Bullion.	Coin.	Bullion.		
January....	\$4,500,000	\$1,000,000	\$59,000	\$40,000	\$2,539,000	\$20,000	\$2,000	\$8,213,000
February..	2,140,000	1,200,000	61,000	84,000	1,563,000	.....	15,000	5,034,000
Total, 1861	\$6,640,000	\$2,200,000	\$120,000	\$74,000	\$4,102,000	\$20,000	\$17,000	\$13,247,000
Total, 1860	19,000	48,000	17,700	38,000	3,429,000	1,800	1,579,000	2,000,000
Total, 1859	10,000	23,000	81,080	9,000	1,034,000	4,800	1,137,000	263,000

The operations of the Assay-office were reflected in the increased activity at the United States Mint, Philadelphia, where the coinage in two months has reached the large amount of \$15,720,138, against \$2,768,328 in the same period last year, and \$810,288 in the same two months of 1859, as follows:—

UNITED STATES MINT, PHILADELPHIA.						
	Deposits.		Coinage.			
	Gold.	Silver.	Gold.	Silver.	Cents.	Total.
January.....	\$8,209,669	\$156,418	\$8,052,821	\$91,100	\$5,000	\$8,148,421
February....	5,244,816	158,361	7,438,016	121,700	12,000	7,571,717
Total, 1861..	\$13,454,485	\$309,774	\$15,490,837	\$212,800	\$17,000	\$15,720,138
Total, 1860..	2,058,578	86,578	2,656,723	62,600	48,000	2,768,328
Total, 1859..	228,195	129,285	207,808	188,000	62,000	810,288

The state of affairs at the South has caused no suspension in the operations at the New Orleans Mint, where the coinage for February was \$295,000.

* From Europe.

The increase of United States coins is very rapid, it appears, under the double action of arrivals from abroad, and also from California. The law in relation to foreign coins not having been changed, it becomes necessary to recoin those that arrive, an operation which, offsets the value of exchange based upon their re-export. The new silver coins of Austria have been recognized as follows:—

AN ACT DECLARING THE VALUE OF THE NEW SILVER FLOLIN OF AUSTRIA.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the new silver florin of Austria shall, in all computations at the Custom-house, be estimated at forty-six cents and nineteen-hundredths of a cent. Approved March 2, 1861.

The course of the foreign exchange has been as follows, comparatively:—

RATES OF BILLS IN NEW YORK.

	London.	Paris.	Amsterdam.	Frankfort.	Hamburg.	Berlin.
Dec. 1..	1 a 5	5.47½ a 5.40	89½ a 40½	40 a 40½	84½ a 35½	69½ a 76½
15..	1 a 4	5.60 a 5.50	89 a 39½	39 a 39½	84½ a 34½	72½ a 78½
Jan. 1..	2½ a 5	5.40 a 5.45	88½ a 39½	39½ a 39½	34½ a 35	68½ a 69½
15..	5½ a 6½	5.30 a 5.33½	40 a 40½	40½ a 40½	85½ a 35½	70½ a 70½
Feb. 1..	5 a 6	5.37½ a 5.35	40 a 40½	40½ a 40½	85½ a 36	70½ a 70½
15..	2 a 5½	5.42½ a 5.35	89½ a 40½	40½ a 40½	85½ a 35½	70½ a 70½
Mar. 1..	3½ a 6	5.40 a 5.35	89½ a 40½	40½ a 40½	85½ a 35½	70½ a 71
15..	6 a 6½	5.37 a 5.30	40 a 40½	40½ a 40½	86 a 36½	70½ a 71½

The rate for sterling rose to 7 per cent, in face of the large imports of specie to New York, and no longer admits of the continued import of specie, after the quantity that has already come to hand. This, however, is the season of the largest export of cotton, and from this time to the close of the cotton year the supply of bills from that source will continue to decline, but on the other hand there are those who look for a diminished importation of goods under the new tariff arrangements. This is the more likely, since, notwithstanding the small importations with which the year commenced, an unusually large proportion of them went into warehouse, and these goods have still to find a market at the higher rate of taxation. The following is an official statement of the amount in warehouse, March 1st:—

Total value of goods in bond, February 1, 1861.....	\$24,092,379
Entered warehouse from foreign ports in February.....	3,751,678
Received in bond from other domestic ports.....	50,938

Total.....	\$27,894,990
Withdrawn for consumption.....	\$5,781,728
Reshipped to foreign ports.....	526,895
Transported to other domestic ports.....	148,306
	6,456,429

Leaving stock in warehouse, March 1, 1861.....	\$21,438,561
“ “ “ 1860.....	9,755,890
“ “ “ 1859.....	5,502,008
“ “ “ 1858.....	18,869,507
“ “ “ 1857.....	13,692,055
“ “ “ 1856.....	9,513,151

There was, therefore, \$12,000,000 more in value in bond, March 1st, than for the same date in the previous year. and \$16,000,000 more than in March, 1859. This accumulation throws the supply of goods farther into the spring season, and discourages fresh importations, in face of the more unpromising legal and political circumstances.

The business of the port continues to present the remarkable effects of political disquiet. The general result is a large increase in exports, without a corre-

sponding increase in goods; and the proceeds of the produce sold abroad come in a larger proportion than usual in the shape of specie. For the month of February, the imports show the following aggregates for many years:—

Years.	Imports.	Years.	Imports.	Years.	Imports.
1847...	\$7,409,637	1852....	\$9,249,577	1857....	\$25,524,492
1848....	9,757,900	1853....	17,421,920	1858....	9,209,043
1849....	8,564,226	1854....	11,095,580	1859....	18,8 8,370
1850....	8,829,821	1855....	12,081,482	1860....	19,356,379
1851 ...	12,054,408	1856....	16,086,283	1861....	16,841,707

The aggregate for the present year is composed largely of specie, and goods entered for warehouse. The quantity entered for consumption is less than half that of last year, but the withdrawals have been larger:—

FOREIGN IMPORTS AT NEW YORK IN FEBRUARY.

	1858.	1859.	1860.	1861.
Entered for consumption.....	\$5,840,256	\$15,231,466	\$14,467,040	7,008,399
Entered for warehousing.....	1,830,623	1,264,502	1,526,772	3,751,678
Free goods.....	1,798,105	2,260,222	3,172,392	3,312,563
Specie and bullion.....	240,059	92,200	190,175	2,274,067

Total entered at the port.....	\$9,209,043	\$18,848,370	\$19,356,379	\$16,841,707
Withdrawn from warehouse...	4,732,706	2,167,998	2,338,649	5,781,728

We have here a decline of \$7,400,000 in the entries for consumption. The total receipts of foreign goods at New York since January 1st, show similar proportions, as in the following table. The short supply of imports seems to have induced larger withdrawals from warehouse during the month of February. These were to meet the Southern demand that sprang up to forestall the operations of the Southern Confederacy tariff, and also occasioned by the new Federal tariff, which goes into operation April 1st:—

FOREIGN IMPORTS AT NEW YORK FOR TWO MONTHS, FROM JANUARY 1ST.

	1858.	1859.	1860.	1861.
Entered for consumption....	\$10,010,273	\$30,788,178	\$30,988,214	\$15,192,236
Entered for warehousing...	3,240,071	2,466,209	4,271,133	12,812,358
Free goods.....	3,514,787	4,878,442	5,435,080	6,138,228
Specie and bullion.....	549,631	163,508	418,225	9,587,296

Total entered at the port...	\$17,314,762	\$88,295,832	\$41,112,652	43,169,118
Withdrawn from warehouse.	9,238,297	4,256,968	5,302,678	8,225,001

We add hereto, as a matter of some interest, a comparative table of the imports at the port, for the first eight months of the fiscal year. The total of the first six months showed a relative increase, including specie, of over \$4,500,000:—

FOREIGN IMPORTS AT NEW YORK FOR EIGHT MONTHS ENDING FEBRUARY 28.

	1858.	1859.	1860.	1861.
Six months.....	109,688,702	91,082,422	116,050,642	120,542,384
January.....	8,105,719	19,447,862	21,758,278	26,827,411
February.....	9,209,043	18,848,370	19,356,379	16,841,707

Total for eight months.....	127,003,464	129,378,765	157,113,294	163,711,502
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The revenue derived from duties has been less than last year, but is larger than for the same period of the two previous years:—

CASH DUTIES RECEIVED AT NEW YORK.

	1858.	1859.	1860.	1861.
Six months ending January 1...	\$16,345,553	\$15,387,618	\$19,822,030	\$17,637,802
In January.....	1,641,474	3,478,471	3,899,743	2,059,203
February.....	2,068,784	3,328,688	3,378,043	2,528,734

Total eight months.....	\$20,050,813	\$22,194,786	\$26,599,239	\$22,225,741
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Of imports, dry goods show the most remarkable decline; the quantities entered for consumption being little more than one-third of those of last year, and

hardly more than in 1858, when the effects of the panic were upon the market. Nevertheless, the amounts taken from warehouse, are large, raising the quantity put upon the market to an amount larger than in 1858 :—

IMPORTS OF FOREIGN DRY GOODS AT NEW YORK FOR THE MONTH OF FEBRUARY.

	ENTERED FOR CONSUMPTION.			
	1858.	1859.	1860.	1861.
Manufactures of wool	\$1,043,010	\$2,559,022	\$3,719,387	\$1,229,084
Manufactures of cotton.....	1,128,149	2,570,029	2,680,636	675,524
Manufactures of silk.....	1,685,263	3,358,547	5,004,487	2,193,700
Manufactures of flax.....	358,950	956,645	1,004,431	250,865
Miscellaneous dry goods.....	352,942	789,209	695,839	430,900

Total..... \$4,519,319 10,183,452 13,104,780 4,780,073

	WITHDRAWN FROM WAREHOUSE.			
Manufactures of wool.....	\$197,543	\$174,617	\$284,256	\$1,179,947
Manufactures of cotton.....	865,250	357,320	465,690	1,280,431
Manufactures of silk.....	722,697	156,965	219,243	1,086,337
Manufactures of flax.....	393,729	177,328	123,332	432,069
Miscellaneous dry goods.....	227,937	70,580	85,225	207,061

Total..... \$2,707,156 \$986,810 \$1,177,746 \$4,165,885
Add entered for consumption... 4,519,319 10,183,452 13,104,780 4,780,073

Total thrown on market.... \$7,226,475 11,120,262 14,282,526 8,945,968

	ENTERED FOR WAREHOUSING.			
Manufactures of wool	\$216,081	\$106,179	\$245,118	\$524,024
Manufactures of cotton.....	492,804	87,337	253,830	488,912
Manufactures of silk.....	127,822	52,481	152,970	641,330
Manufactures of flax.....	126,395	40,856	57,285	224,331
Miscellaneous dry goods.....	76,331	45,900	66,700	124,216

Total..... \$1,038,883 \$332,753 \$775,908 \$2,002,863
Add entered for consumption ... 5,519,319 10,183,452 13,104,780 4,078,073

Total entered at the port... \$5,558,202 \$10,516,205 \$13,880,683 \$6,782,936

The entries for warehouse have for the month been less than the withdrawals. Compared with the receipts for the corresponding period of last year, the imports since January 1st show a still greater decline. The total of dry goods landed at the port for two months is over \$8,000,000 less than for the same period of 1859 :—

IMPORTS OF FOREIGN DRY GOODS AT THE PORT OF NEW YORK FOR TWO MONTHS FROM JANUARY 1st.

	ENTERED FOR CONSUMPTION.			
	1858.	1859.	1860.	1861.
Manufactures of wool.....	\$1,379,163	\$4,819,879	\$6,161,636	\$3,047,996
Manufactures of cotton.....	1,511,770	5,631,069	5,087,414	1,409,272
Manufactures of silk.....	2,169,848	6,429,629	9,559,135	3,688,356
Manufactures of flax.....	543,338	1,992,100	1,739,687	634,542
Miscellaneous dry goods.....	513,623	1,308,505	1,176,179	822,893

Total..... \$6,116,242 \$20,211,182 \$23,724,051 \$9,603,039

	WITHDRAWN FROM WAREHOUSE.			
Manufactures of wool.....	\$911,556	\$370,740	\$536,481	\$1,472,849
Manufactures of cotton.....	1,459,372	761,630	1,040,717	1,588,735
Manufactures of silk.....	1,339,066	283,082	550,690	1,374,494
Manufactures of flax.....	719,193	352,901	269,947	597,917
Miscellaneous dry goods.....	369,618	127,172	161,509	293,412

Total..... \$4,819,315 \$1,895,525 \$2,559,678 \$5,227,407
Add entered for consumption .. 6,116,242 20,211,182 23,724,051 9,603,039

Total thrown upon market. \$10,935,557 \$22,106,707 \$26,283,624 \$14,930,446

ENTERED FOR WAREHOUSING.

	1858.	1859.	1860.	1861.
Manufactures of wool.....	\$480,897	\$228,505	\$655,475	\$2,294,647
Manufactures of cotton.....	916,576	840,062	622,780	2,481,806
Manufactures of silk.....	553,266	166,695	402,845	2,324,916
Manufactures of flax.....	241,536	99,657	124,777	781,811
Miscellaneous dry goods.....	165,829	56,711	120,760	854,074
Total.....	\$2,308,104	\$881,630	\$1,926,637	\$8,136,754
Add entered for consumption...	6,116,242	20,211,182	23,724,051	9,608,793
Total entered at the port...	\$8,424,346	\$21,092,812	\$25,650,688	\$17,739,039

The exports for the month exceed in domestic produce those of any former year. The total, including specie, is less than for the same month of 1858 :—

EXPORTS FROM NEW YORK TO FOREIGN PORTS FOR THE MONTH OF FEBRUARY.

	1858.	1859.	1860.	1861.
Domestic produce.....	\$3,709,870	\$3,288,592	\$5,699,387	\$10,236,820
Foreign merchandise (free)....	186,862	188,210	844,994	137,950
Foreign merchandise (dutiable)..	326,845	268,881	681,489	429,537
Specie and bullion.....	3,746,920	2,371,427	977,009	1,102,926
Total exports.....	\$7,920,497	\$6,107,060	\$7,652,879	\$11,907,233
Total, exclusive of specie..	4,178,577	3,785,638	6,675,870	10,804,307

The total exports, exclusive of specie, from New York to foreign ports for the first two months of the year, have been \$9,249,818 more than last year. The increase has been large in domestic produce. The specie exports for January and February have been in both months greatly less than for the corresponding months of the many previous years :—

EXPORTS FROM NEW YORK TO FOREIGN PORTS FOR TWO MONTHS, FROM JANUARY 1.

	1858.	1859.	1860.	1861.
Domestic produce.....	\$7,918,176	\$7,045,774	\$10,998,529	\$20,514,745
Foreign merchandise (free).....	327,987	307,699	668,997	537,890
Foreign merchandise (dutiable)..	617,153	496,168	1,030,806	895,515
Specie and bullion.....	8,492,581	4,677,115	1,830,571	1,161,820
Total exports.....	\$17,855,847	\$12,526,756	\$14,528,903	\$23,109,970
Total, exclusive of specie...	8,868,316	7,849,641	12,698,332	21,948,150

Compared with the previous fiscal year, the total exports of produce and merchandise from New York to foreign ports during eight months, show an increase of \$32,803,194, and a still larger increase over 1859 :—

EXPORTS, EXCLUSIVE OF SPECIE, FROM NEW YORK TO FOREIGN PORTS FOR EIGHT MONTHS.

ENDING WITH FEBRUARY.

	1858.	1859.	1860.	1861.
Six months.....	\$34,702,441	\$27,994,834	\$36,371,053	\$59,924,434
January.....	4,689,739	4,114,008	6,022,462	11,143,843
February.....	4,178,577	3,785,633	6,675,870	10,804,307
Total.....	\$43,565,757	\$35,844,475	\$49,069,390	\$81,872,584

SWEDEN—ITS DUTIES.

A new customs law comes into operation on the 1st of April, abolishing the difference between bonding and warehousing in Swedish ports, and raising the warehousing duty *ad valorem* to one per cent on the tariff rate.

PROCEEDINGS OF THE CHAMBER OF COMMERCE, MARCH 7, 1861.

The Chamber of Commerce held its regular monthly meeting at 1 P. M., the President, PELATIAH PERIT, Esq., in the Chair.

The following gentlemen were elected members :—

Robert Belloni.	Algernon S. Jarvis.	Henry F. Spaulding.
Justus R. Bulkley.	Samuel McLean.	Francis Tryon.
William B. Clerke.	William Macnaughtan.	Thomas Woodward.
Isaac B. Gager.	Joseph P. Pirason.	

MR. THEODORE DEHON was elected a member of the Committee of Arbitration, in the place of ROBERT MINTON, whose term had expired.

MR. OPDYKE, on behalf of the Committee of Quarantine, asked for authority for the committee to prepare a remonstrance against such of the provisions of a bill relating to quarantine, now pending before the Legislature, as relate to regulations to be imposed upon vessels entering or leaving port.

MR. OPDYKE, from the Committee of the Chamber appointed to go to Washington to remonstrate against the passage of the Morrill Tariff Bill, reported that they had conferred with the Congressional Committee upon that subject, and that many of the provisions of the bill, particularly those relating to the warehouse system, had been modified, and the bill thereby materially improved. He thought, however, that the bill, even in its present shape, would not be satisfactory to the commercial public, and demands further modification.

MR. LINDSAY'S PROPOSITIONS IN REFERENCE TO THE COASTING TRADE, &c.—Capt. Ezra Nye, in behalf of the committee appointed to confer on the propriety of opening the coasting trade of the United States to British ships, in exchange for a similar privilege to American ships, in British waters, presented the following report :—

Report of the Special Committee on the Coasting and Lake Trade, and Registration of Ships—Report of the Majority, February 7th, 1861.

Your committee, in their investigation of the subjects referred to them, find the following clause in the Constitution of the United States :—"No preference shall be given, by any regulation of commerce or revenue, to the ports of one State over those of another," which the intervening coasts of foreign nations does not invalidate. This limits their inquiries to the policy of opening the coasting trade, the trade of the lakes, and the registration of foreign ships.

It does not appear to your committee, that any act of reciprocity offered by Great Britain would compensate us for sharing with her our great and rapidly increasing coasting trade, augmenting annually about 100,000 tons. They believe that our interests demand we should cherish this trade, and establish our own system, irrespective of those of other nations. With our fishing and whaling, it furnishes our principal schools for training native seamen, the number of whom is unfortunately steadily decreasing.

The vast extent of our coast, the facilities for transportation on our railways, daily increasing the rapidly developing resources of our great interior, render it difficult to overestimate the importance of retaining the control of our coasting trade.

In opening the lake trade, we should have much to lose and little to gain. Mr. Lindsay truly says, "the shipowner is a mere carrier, and does not create trade; the trade must be created for him."

Now we have the lion's share of the trade on the lakes, sufficient tonnage to carry it on, with abundant material for its increase, when required. Lake Michigan is exclusively an American lake; the trade at the present time is equal to, if not greater, than all the Canadian shore of the other lakes. And when we look at the number of miles of railroads, bringing to the shores of this lake the product of millions of acres of the richest land, a small portion only under cultivation, who can calculate the future value of the trade of this lake? Turning to Lake Superior, we find her large and increasing trade almost entirely confined to the American shore, while the Canadian remains a wilderness, little known, except to the hunter, fisherman, and excursionist. Some idea of the

importance of the trade of this lake may be formed from the fact that 200,000 tons of iron ore were shipped during the past year, not to enumerate pig iron, copper, or the large amount of return freight.

On the subject of granting registers to British or foreign ships, your committee believe the result would be the introduction of inferior British American and iron ships. The latter being particularly undesirable, from the difficulty of ascertaining the quality of the material, of which appearances are no guaranty. A writer in the *London Shipping Gazette*, styles the iron screw steamships now extensively employed in navigating the waters of northern Europe, "sea-going coffins." No less than six or seven of them were lost (five foundered) in a gale, October 3d and 4th, the loss of life amounting to about two hundred persons. Iron shipbuilding has been successfully commenced in Boston, Williamsburg, Philadelphia, and Wilmington, Del. Messrs. Harland, Hollingsworth & Co., of the latter place, builders of steamship *Champion*, write:—"Iron ship-building is steadily increasing; we have built seventy-three iron hulls, large and small. A first class iron hull costs no more than a first class wooden hull, coppered. We now use American iron altogether, it being the best article manufactured." As our forests recede before the settlement of our country, and the price of timber necessarily increases, this branch of business, if not interfered with, promises to become of great importance, in furnishing us with cheap and reliable iron ships, and aiding, materially, in developing our unlimited resources of coal and iron. We are all well aware that the policy of England, up to a very recent date, has been one of protection to agriculture, manufactures, and commerce, until not only her interests, but her necessities, demand a change. It is apparent, however, that her former policy laid the foundation for her commercial greatness, and naval superiority. Her navigation laws were in force about two hundred years, and were only repealed some twelve years since, when iron ship-building was in its infancy, and our clipper ships were required for the Australian trade. This demand has ceased, and they are now prepared to supply the world with iron ships. The legislation of England, in her maturity, is as little adapted to our country, as the food of the full grown man to the infant. We not unfrequently hear of the commercial policy of Great Britain as liberal, in comparison with our own. Can that policy be termed liberal, which, according to Mr. Lindsay's own showing, levies an annual tax of one million of dollars on our shipping, without a single corresponding charge?

We have not space to go into detail, but will contrast the policy of the British Government with our own in respect to lights. It levies light dues on all our vessels, amounting to over \$250,000 per annum, whether we use the lights or not. For instance, dues are charged on all American vessels from the United States to the ports of Great Britain, for the use of Cape Race light, New Foundland, which our sailing ships on that route never use. Our lights, which are placed on all required points, are numerous, and cost us, annually, about \$1,150,000. They are, and ever have been, free to Great Britain and all the world. On the Florida and Gulf coast, in an extent of three hundred and sixty miles, we have eight lights, which are nearly as much used by the tonnage of Great Britain as our own. On the eastern or Bahama side, in an extent of four hundred and twenty miles, she furnishes but three lights, and those important passages through which our steamers to and from Aspinwall carry their numerous passengers and vast amount of treasure, remain unlighted, causing frequent detention and occasional stranding, recently, that of the *North Star*. The pilot laws of the United States apply equally to American and British vessels. The payment is strictly for personal services, and no part is applied to the improvement of harbors or roadsteads, and it is as little compulsory in requiring the employment of pilots as is consistent with sustaining an efficient system of pilotage. The removal of the onerous charges which Mr. LINDSAY offers as a concession appears to your committee a simple act of justice. The coasting trade of Great Britain, diminished rather than increased by her railways, has not been and does not promise to be of any advantage to us. We are not disposed to undervalue the colonial trade already open, or the further privilege proposed by Mr. LINDSAY, of carrying from one colonial port to another, but we do not consider them as equivalent to the concessions asked of us.

To conclude, your committee believe that a review of the events of the last autumn will prove that we have no "rough edges" to "rub off," and in following the wise policy of our great commercial rival of "protection," while necessary to our own interest, we cannot be accused of creating "causes of friction."

EZRA NYE,
OLIVER SLATE, Jr.,
FREDERICK W. JONES, } Committee.
WILLIAM T. COLEMAN, }

REPORT OF THE MINORITY, FEBRUARY 7, 1861—Believing, as I do, that free trade is the true principle of commerce, I am obliged to withhold my assent from the report of the majority of the committee on coasting trade, &c., and beg leave to present the following minority report.

Looking to the interests of the country at large, and not to that of shipowners alone, I think that foreign vessels ought to be allowed to participate in our lake trade and in our coasting trade, far and near, as freely as they do in our foreign trade.

It is the opinion of some, I am aware, that if that should be permitted, our own vessels would be interfered with so much as to make the business unprofitable to them. But I cannot see it in that light, and would point to our trade with the West Indies and South America. On those routes foreign vessels have now every advantage that we have, and yet the whole of that carrying trade may be said to be in our hands. I think it would be the same in our coasting trade. It appears to me, that whoever will do the work best and cheapest ought to have it, and I have no fears for the result. I think, however, to enable us to compete successfully, that our citizens ought to have the privilege of building or purchasing ships or steamers wherever they may find it their interest to do so; and that those vessels should be entitled to registry in the United States the same as vessels built in this country.

With respect to English light dues, I think it very probable if our government should propose to that of Great Britain to throw open the coasting and lake trade on condition that the English light dues should be abolished, that the proposition would be at once acceded to, and that the gain would be greatly in our favor. All of which is respectfully submitted.

WILLIAM NELSON.

Captain NYE thought that the opening of the lake trade would be injurious to the country. He thought, too, that the importance of retaining control of the coasting trade was obvious to every person who considered the subject.

Mr. Low believed that the trade of the lakes should be confined to their own country. In reference to the registration of ships, he considered that they were capable of building vessels of as good or better materials than those built in England. They were then commencing to build ships of iron of a superior quality, which would successfully compete with those of British workmanship.

Mr. ROYAL PHELPS was in favor of reciprocating the privileges extended to American shipping; but hoped that the question would not be pressed at that meeting, as the report had been delivered to the members only a few days ago, and therefore members of the Chamber had not had sufficient time to consider the questions upon which they were called upon to come to conclusions.

Mr. OPDYKE thought it would be well to open the coasting trade to England on condition of receiving in return those privileges for American shipping which Mr. LINDSAY had alluded to. About \$1,000,000 was collected in Great Britain from American ships, and measures which would be calculated to remove those dues would be advantageous to the country.

Captain NYE replied that if such dues were abandoned by England, there would be no concession, as America did not collect similar dues from British ships. American ships in England were taxed to improve harbors too small to admit them. The further consideration of the subject was laid over until the next meeting.

Messrs. CHARLES SQUIRE, Jr., ABRAM S. HEWITT, CHARLES W. COPELAND, and WM. L. KING were nominated as members at the monthly meeting in April next.

Art. II.—MARINE STATISTICS.

MARINE insurances were made at least as early as the thirteenth century, but the same principle was only applied to life insurance about a hundred years ago; still the operations of the former, as far as regards the exact value of the premium to be charged, are yet in a state of great uncertainty, while the calculations of the latter are made with scientific precision. The laws of mortality upon which they are based are as well understood as those which govern the movements of the stars, but marine disasters have never been subjected to orderly investigation, and are hardly admitted to be under the dominion of law at all. The result of the business of a well regulated life company can be predicted with astonishing accuracy, but in marine insurance, as yet, all is mere conjecture.

When we consider the two questions in the abstract, it would seem as easy to pronounce what is a fair wager, upon the loss of a ship at the end of a certain time, or upon any particular voyage, as upon the death of a human being in a given period. But in practice there is just this difference, that in solving the one problem, we can base our calculations on tables of mortality, extending for over hundreds of years, and in answering the other, we have no tables at all to consult. It is easy to see, therefore, why greater accuracy can be attained in the one case than in the other.

Considering the importance of marine insurance to the commercial world, and how desirable a thing it would be to be able to decide, in every case that presented itself, the true premium to be charged; and to place all its calculations on such a basis, that the failure of a company need never occur except through mismanagement; considering these things, it is worth while to inquire why, in the long period that this contract has been in familiar practice among merchants, no tables of wreck and disaster have ever been collected; and also whether it is possible to collect and arrange such facts relating to this subject, as would serve as a basis for the same exact calculations in this branch of insurance, as are now made in the other?

The circumstances under which the two systems originated may perhaps answer the first question, and a consideration of the analogy of the one to the other, may assist us in answering the second.

Marine insurance had its origin in times of great ignorance, when the regularity of the operations of nature was almost unknown, and when the idea that all events, however variable they seem, are governed by fixed laws, could scarcely be conceived. As far back as we have any history of modern commerce, traces of it can be found. Some writers assert that it was known to the Romans, others say that we are indebted to the Jews for its origin, at the time of their expulsion from France in the year 1182; and that they then invented the contract as a means of protecting their property from the dangers of the sea, on their migration to Italy. Whether this be a romance or not, it is at least certain that the practice was familiar to the Lombards in the thirteenth century, who then monopolized European commerce, and has been very general among the mercantile community ever since.

Starting thus, in the infancy of commerce, and being merely a combination for the mutual division of losses arising from the hazards of the

sea, it is fair to suppose that the premiums were based upon mere conjecture, and were regulated from time to time by individual experience. It is an admitted fact that men engaged in commercial pursuits, are apt, with a few rare exceptions, to take particular rather than general views, of the subjects presented to their consideration; and are also apt rather to cling to old customs, than to strike out new ideas of their own. It will be easily conceived, therefore, that under these circumstances, each man must have followed as nearly as possible in the footsteps of his predecessor, basing his judgement on the knowledge and experience that were within his individual reach, and never dreaming of better methods for attaining the same object. On the other hand, life insurance was the result of the speculations of philosophers, and has been under scientific guidance from the commencement. The origin of the theory of probabilities upon which it is founded is a little curious, and is thus related by Mr. Samuel Brown in a paper published in the April number of the *London Assurance Magazine* in the year 1856:—

“Poisson remarks, that a problem relative to games of chance, proposed to an austere Jansenist by a man of the world, was the origin of a branch of science, now one of the most important in its effects on society. It was in 1654 that the Chevalier de Méré applied to Pascal for a solution of two problems, for which he was unable to find answers. The one was, to ascertain in how many throws one might bet with advantage that two sixes would be thrown with two dice; the other, to find a rule for dividing the stakes between two players (who were desirous of breaking off an unfinished game) in exact proportion to their relative fortune at the time, and to their chances of winning the remaining stakes. Pascal considered all the possible combinations that could be formed by the simultaneous throw of two dice, and of all the possible changes which might occur in a game of cards, interrupted at any point, and what number of them were in favor of the event for which his solution was required. He then computed the number of cases in which two sixes could be thrown with two dice, and the actual changes which in the actual state of the game of cards, would secure to each player, separately, the whole or any part of the stakes, and thus arrived by proportion at the required result. Simple as this method seemed, it was the first attempt to employ mathematics in such subjects—at least, the first that, being closely followed up, led directly to the great discoveries that ensued. Fermat, a magistrate in the Parliament of Toulouse, and a mathematician of great repute in his day, was a friend of Pascal, one with whom he corresponded daily on the subject of his studies, and to whom he freely communicated his doubts and his discoveries. He forwarded to him the solution he had arrived at. The original correspondence is now lost; but it appears clear that in his solution he had merely replied to the questions put to him, and however ingenious and minute the investigation, it did not lead to ready solutions of other questions of the same kind. It was Fermat who generalized the solution, and found a rule not merely for ascertaining the value of each player's expectation in the particular case referred to, but at any moment of interrupting the game, and between any number of players. This was the next step, and far the most important one, in the science of probabilities. Without it, the attempt of Pascal might have remained like some previous problems and speculations of Galileo and Cardan, in obscurity, till a much later

period." These investigations were followed by others of a similar nature, but it was not until fifty years afterwards, in 1693, that Dr. Halley applied them to the law of mortality. His materials were the records of the births and burials in the city of Breslau, in Silesia, for a period of five years, from 1687 to 1691. And although he had no means of ascertaining the number of persons living, with which to compare them, and could merely obtain the number of deaths and the ages at which they took place, still he drew up from these data the first life table, the form of which has been followed ever since. His discovery did not attract much attention at the time, and it was not until seventy years afterwards, in 1762, that the first company for making insurance upon lives was formed. This society started under the auspices of two mathematicians, Simpson and Dodd, who were assisted by Dr. Price.

It is no wonder, then, that the calculations of life insurance are exact; being founded on figures that cannot lie, while those of marine insurance are vague and uncertain, depending, as they do, upon individual experience and general usage. The one started in a philosophic age and found all its materials ready made to hand; the other was in familiar practice among merchants at a period when knowledge was very limited, and the idea that all things are subject to some fixed law entirely unknown. Four hundred years before Pascal's discovery, sea insurances were made. It is not singular, then, that in the commencement, no one should have dreamed of calculating the chances of his ventures by mathematical analysis, or thought it possible to apply the theory of probabilities to settling before hand the amount of his earnings. But in the present day, with all the evidence of the utility of this calculus before us, and with all the proofs of the certainty of its results, especially as applied to the operations of life companies, it is a little strange that no one has thought of applying it to marine insurance. When we consider how its application would increase the security of the merchant by placing the solvency of companies on a surer basis; how it would diminish the anxiety of the underwriter by introducing an element of certainty into his calculations; and how it would place the burden of high premiums where it rightfully belongs, that is, on those whose insurances are unprofitable; when we consider these things, it is at least worth while to inquire whether it is possible to introduce the calculus of probabilities into the operations of marine insurance.

In order to answer this question, it will be necessary to see what tables are used by the life companies, what kind of facts they are based upon, and what calculations are deduced from them. It will be necessary also to make a similar examination of the basis and results of casualty insurance, for this perhaps resembles marine more than the other. We will then be able to judge whether similar tables of ship mortality and ship accident could not be made from data already in existence, or which might easily be obtained. The tables used by life companies are simply records of the number of deaths which take place year by year in a given number of persons, until all have died. Taking the celebrated Carlisle table as an illustration, out of 10,000 lives, we find in the first year there are 1,539 deaths, leaving 8,461; and out of these in the second year 682 die, and so on until the one hundred and fourth year, when only one is left. This and similar records form the basis of their operations. The data upon which they are founded have been collected from time to time,

as the following list will show, and are merely records of births and deaths, and enumerations of population:—

1. A record of the Births and Burials of the city of Breslau, in Silesia, from 1687 to 1691.
2. The Mortality bills of London from 1728 to 1737.
3. Lists of the Tontine Schemes in France, and the Necrologies of Religious Houses.
4. The register of the Assignable Annuities in Holland, for 125 years before 1748.
5. The Mortality of Northampton for forty-six years prior to 1780.
6. The Mortality of Chester for ten years, from 1772 to 1781.
7. Seven Enumerations of the entire Population of Sweden, from 1755 to 1776.
8. The recorded deaths in Stockholm for nine years, 1755 to 1763.
9. The Mortality of Norwich for thirty years prior to 1769.
10. The Mortality of Holycross, Salop, for thirty years prior to 1780.
11. The Mortality of Warrington for nine years, 1781.
12. The Mortality of Vienna, Berlin, and Brandenburg for long periods before 1766.
13. Several Enumerations of the Canton de Vaud, Switzerland.
14. The Mortality of Carlisle for eight years prior to 1787.
15. The Mortality experienced by the Equitable Society, 1834.
16. The Mortality experienced by the Amicable Society for about seventy years prior to 1831.
17. The Recorded Mortality of Government Annuitants, &c., (Finlaison, 1829.)
18. The Recorded Experience of seventeen life offices, embracing assured lives to the number of 83,905.
19. The English Life Table, (No. 1,) deduced from the numbers of the living at different ages of the census of 1841, and the deaths at corresponding ages in the same year, (Dr. Farr.)
20. The English Life Table (No. 2,) based on the census of 1841, but the observations on deaths extending for a period of over seven years; viz., from 1838 to 1844.
21. The Experience of the Economic Life Office based on 9,335 lives, 1857.

From these simple data calculations are made which do not surprise us, because they are familiar, but which are in themselves as wonderful as any of the achievements of modern science. Not only can the actuary tell to a cent, what is the present value of a sum payable to the survivor, on the death of one, two, or three persons; or of a sum varying in amount according to the order of their deaths; or, in a word, of a sum depending upon any contingency of mortality; not only can he do these things with unvarying exactness, but he can also tell by examining the books of a company, and knowing what tables of mortality they use, what their chances of profit or loss may be, and he can even predict what percentage of the one or the other will accrue, supposing the nature and amount of their business to remain the same.

Insurances against casualty are based upon similar principles, but have not been in sufficiently long or general practice, to have attained the

same exactness, but are doubtless capable of being, and in the future will be, placed on an equally certain footing.

Marine insurance, however, the most important of all, both in the magnitude of the sums at stake, and in the indispensable protection it affords to commerce, is, as we have seen, mainly without method or order of any kind. Its premiums are regulated by custom and conjecture, and its results are always a matter of uncertainty. It is a contract very similar to life insurance, inasmuch as it is a wager made on a future unknown event; but it differs from the life contract in this respect, that the one provides against a simple event, death; and the other against a compound event, total loss, partial loss, and general average, (this latter being neither a total loss nor a partial loss, but an expense incurred to prevent the one or the other.) Either one of these three things may occur to any risk that is taken, and the first and third, or the second and third, may both occur to the same risk. This consideration will of course complicate the calculations to be deduced from the tables, but would be of very little importance in collecting them, for the facts can almost as easily be arranged in three columns as in one. Total losses may be compared with deaths, and partial losses with casualties to individuals, but general averages present an original feature. These, however, are the three things insured against, and records of their proportion to the whole number of insurances would be all that is required for complete wreck tables. The causes of these various accidents are of no more account in the calculation, than the causes of human mortality; their number and ratio are all that is wanted. How long it would be before these observations would become of practical value in determining average, is an unsettled question. Some theorists pretend that storms are caused by the magnetic action of the sun, and that this action goes through a cycle of augmentation and diminution, in about eleven years. But since losses occur as frequently through the acts of man as from the violence of the elements, this theory, even if sound, would not settle the matter. The required period of observation is indeed very uncertain, and can only be learned from experience. But when we reflect that Dr. Halley made the first life table from only five years' data, and consider the mass of facts that have been since accumulated, and the impetus which his imperfect effort gave to the science, we may be encouraged to make a similar attempt in regard to marine statistics, satisfied that if we do not accomplish much at first, our efforts, at least, will be the means of inducing others to follow in our footsteps.

It must not be supposed, that if these tables were now made and in use, that they would do away with the necessity for wisdom and experience in the managers of marine companies; and reduce to a mere mechanical calculation, a business now requiring ability and intelligence of no ordinary kind. On the contrary, a life company employs a physician to select its risks, and on his knowledge and scientific skill as much depends as upon the actuary. With all the mathematical aid that could possibly be brought to bear upon the subject, much would still depend upon the judgement of the underwriter. No matter how certain the average percentage of loss, it is only within it that safety and profit can be found. The same knowledge of ships and their cargoes, of rocks and shoals, of winds and storms, of laws, customs, and usages of trade, that are now needed without the tables, would still be required with them.

In a word, their introduction would leave the business where it now stands, as far as regards the qualifications needed for conducting it with success. But it would introduce an element of certainty into those calculations that now depend on vague conjecture, and would substitute the methodically arranged experience of many men, for the uncertain recollections of one individual.

These remarks are merely offered as suggestions, in the hope that others more competent and experienced may be induced to consider them. There may be difficulties in the way which would render it impossible to put them in practice; but these are not so great as is commonly supposed, and underwriters have hitherto taken an exaggerated view of their importance. The death of a man is an event which must happen: true! but is not the death of a ship equally certain? They are but boards, and must perish at some time or other, if not by accident, at least by natural decay. And judging from experience, it may be said to be equally certain that partial losses and general averages must be made occasionally by every vessel that floats. Why a man dies need not be considered in insuring, and consequently how a ship is lost or injured is equally unimportant. Mortality tables do not pretend to discriminate in the class of persons exposed to death, or in the causes which produce it. They embrace all sorts of lives, and the deaths are occasioned by every variety of accident and disease. It would be as useless to select one kind of disaster, (say stranding for instance,) as a basis for a wreck table, as it would to tabulate the proportion of death, by any particular disease. And as for the seaworthiness of the ship, or the liability of the cargo to damage, these are as much a matter of discrimination for the underwriter, as the general health of the applicant is to the physician of a life company. None of these things are of any importance, the simple facts of death and disaster are all that is required in either case. These have been already obtained in the one case, and could certainly be easily collected in the other.

The annual publications of Lloyds', the Bureau Veritas, and the American Lloyds', would furnish us with the number of the vessels exposed to risk, and the daily papers in the various commercial cities would give us the number of total and partial losses, and general averages. These might be tabulated year by year, and would form a table, from which the probability of loss at the end of any given period could be deduced. From these materials supplementary tables might be made of the proportion of loss on different voyages. It would be impossible and needless to classify every kind of voyage, and two or three general classes would probably be sufficient. It is only in those trades in which the principal business of the world is carried on, that a sufficient number of observations could be made in a reasonable period of time to form an average of any value, and consequently, these are the only ones to which attention need especially be directed. If these suggestions are correct as regards vessels, the same principles might, with equal propriety, be applied to cargoes. The materials for these observations are collected in every Custom-house, but are not perhaps so easy of access as the others. Much information, however, on this subject, can be attained in the commercial papers, and it only needs patient labor and research to put it all in a convenient and practically useful form.

ANNUAL STATEMENTS OF MARINE INSURANCE COMPANIES OF NEW YORK,

In Tabular Form for 1860.

NAME OF COMPANY.	PREMIUMS RECEIVED DURING THE YEAR.	PREMIUMS EARNED DURING THE YEAR.	LOSSES FOR THE YEAR.	EXPENSES, ETC.	RETURN PREMIUM.	NET PROFIT.	FISCAL YEAR ENDS.
Atlantic.....	\$4,603,725 77	\$4,541,133 59	\$8,419,448 73	\$409,313 55	Included in Ex.	\$1,519,479 33	December 31.
Great Western.....	9,171,991 50	9,418,110 84	1,337,192 43	949,333 30	\$983,173 53	737,373 70*	October 4.
Sun.....	1,314,113 89	1,331,622 62	707,630 33	31,733 70	89,003 87	233,157 73	December 31.
Merchants.....	769,377 83	524,824 85	567,064 06	70,000 52	44,451 84	341,266 45	"
Pacific.....	813,519 33	818,304 69	413,110 06	99,023 13	56,459 53	247,031 41	June 30.
New York.....	806,203 54	794,063 69	635,466 74	47,733 60†	127,191 51	114,200 63	October 31.
Columbian.....	969,330 64	718,998 99	623,566 78	112,502 30	63,233 08	80,271 69	June 30.
Commercial.....	630,430 01	537,405 53	332,733 66	46,063 47†	139,816 67	178,809 99	December 31.
Union.....	549,915 10	537,132 60	137,906 53	124,193 63	67,383 40	140,890 21	February 28.
Orient.....	800,133 40	574,381 11	301,509 14	67,736 23	44,306 94	48,075 10	"
Republic.....	392,775 25	267,560 14	134,993 49	71,345 09	13,206 96	26,700 89	December 31.
Washington.....	193,805 61	143,170 08	64,031 93	46,003 23	5,393 93		
	\$13,786,720 67	\$13,604,471 33	\$8,297,093 97	\$1,660,547 24	\$901,793 10	\$3,383,900 44	

* Including reserve of last year.

† Expenses partially included in Losses.

ASSETS.

	REAL ESTATE.	STOCKS, BONDS, &c.	LOANS ON STOCKS &c.	CASH.	DIVIDENDS AND CLAIMS.	PREMIUMS, NOTES, BILLS, ETC.	TOTAL ASSETS.
Atlantic.....	\$200,000 00	\$2,666,373 43	\$1,190,122 05	\$106,154 67	\$105,190 13	\$2,378,416 34	\$8,645,293 10
Great Western.....	549,500 00*	1,119,447 61	406,350 00	166,777 13	33,804 41	1,030,231 19	3,534,640 39
Sun.....	.....	231,018 29†	.....	123,274 76	35,263 30	773,046 53	1,761,232 07
Merchants.....	.....	339,504 10	140,490 00	71,573 31	77,033 21	513,963 50	1,401,973 17
Pacific.....	67,811 43	231,150 00	197,623 01	73,577 23	53,503 07	449,542 32†	1,060,750 73
New York.....	.....	250,500 00	201,763 80	26,299 19	62,564 48	437,967 45	1,084,416 34
Columbian.....	.....	333,300 00	.....	67,831 88	39,893 77	709,869 67	1,223,654 77
Commercial.....	75,000 00	433,736 17†	895,374 20	70,154 00	39,893 60	476,396 23	1,023,805 00
Union.....	.....	453,575 00	600,000 00†	93,741 10	179,331 81	454,935 95	1,659,348 06
Orient.....	.....	431,329 00	43,650 00	29,110 45	32,361 83	260,644 33	1,336,045 11
Republic.....	.....	91,000 00	.....	77,288 39	.....	237,085 50	438,099 55
Washington.....	.....	60,500 00	30,000 00	65,210 26	24,269 14	96,019 09	275,313 49
	\$391,311 43	\$6,768,938 59	\$3,205,923 06	\$973,543 86	\$733,173 30	\$3,415,903 74	\$31,014,045 77

* Including Bonds and Mortgages.

† Including Loans on Stocks, &c.

† Including Subscription Notes.

MARINE LOSSES FOR JANUARY, 1861.

. The first column refers to the dates of the New York papers wherein full information of the disasters can be obtained.

DATE.	STEAMERS.	MASTERS.	TONS.	WHERE BUILT.	YEAR.	DATE FROM.	WHERE FROM.	WHERE TO.	DISASTERS.	VESSEL AND FREIGHT.	CARGO.	TOTAL.
29	Cora Anderson.	Barry.	1347	Ohio River.	1857	St. Louis.	New Orleans.	St. Louis.	Total loss, sunk 40 m. above Vicksburg.	\$20,000	\$38,000	\$78,000
29	Columbia.	Barry.	1347	New York.	1857	New York.	Charleston.	New York.	Ashore in Maffit channel, Jan. 26, off.	15,000	5,000	20,000
29	Frontier City.	Barry.	1347	Pittsburg.	1857	Washington.	Charleston R.	Arkansas.	Total loss near Napoleon, Ark. Jan. 4.	6,000	10,000	16,000
29	Madison.	Barry.	1347	Pittsburg.	1857	Washington.	Charleston R.	Arkansas.	Total loss, sunk near Uniontown, Ky.	15,000	40,000	55,000
29	Princeton.	Barry.	1347	New York.	1857	New York.	New York.	Rio Janeiro.	Ashore at St. Cruz, at St. Thomas.	15,000	10,000	25,000
29	Wm. Junkins.	Barry.	1347	Baltimore.	1857	Boston.	Baltimore.	Savannah.	Burned at Savannah, Jan. 18.	100,000	30,000	130,000
Totals.										\$168,000	\$143,000	\$309,000
6 Steamers.												
13	Montana.	Brookman.	1090	Boston.	1854	Boston.	New York.	London.	Total loss off Greenwich, Jan. 2.	\$72,000	\$79,000	\$151,000
23	Hamlet.	Brookman.	729	Brunswick.	1847	Brunswick.	Liverpool.	London.	Total loss at Carme, Wexford, Feb.	15,000	5,000	20,000
9	Harrington.	Brookman.	1050	Quebec.	1851	Plymouth.	Mobile.	Liverpool.	Total loss by fire at Mobile Bay, Jan. 5.	24,000	40,000	64,000
9	Calcutta.	Brookman.	1050	Quebec.	1851	Plymouth.	Mobile.	Liverpool.	Ash. Tortugas, Dec. 41 at Key West, 28.	6,000	10,000	16,000
9	Champlain.	Brookman.	1144	Quebec.	1851	Boston.	New York.	London.	Put back to N. Y. leaky, disc. to repair.	10,000	5,000	15,000
12	Champlain.	Brookman.	1144	Quebec.	1851	Boston.	New York.	Rio Janeiro.	In distress at N. Y. leaky, disc. to repair.	5,000	2,000	7,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Put into St. Thomas, 17, lost 415 Jan. 8.	20,000	50,000	70,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Put back to Honolulu, 17, 18.	2,000	2,000	4,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Damaged in hurricane at Yonkers.	4,000	2,000	6,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Lost on coast in Santa, Jan. 12.	8,000	40,000	48,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Total loss at Hornum Bay, 1. Dec. 23.	70,000	100,000	170,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Total loss by fire, at sea, Jan. 12.	40,000	50,000	90,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Put in Savannah, for repairs, Jan. 16.	3,000	2,000	5,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Ahead at sea, Lat. 40° Lon. 81° Dec. 17.	20,000	13,000	33,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Total loss on Santa Rosa Isl. Jan. 17.	20,000	4,000	24,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Ashore near Cape Henlopen, Jan. 25.	10,000	40,000	50,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Ashore on Sandy Key, burnt up.	15,000	20,000	35,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Ashore at Cape Patrice, at Havre.	2,000	5,000	7,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	In Cortado Bay leaky, Nov. 2.	5,000	3,000	8,000
23	Charles A. Sumner.	Brookman.	900	Baltimore, Md.	1854	New York.	New York.	New York.	Lost in the Straits of Fues.	5,000	5,000	10,000

DATE	SHIPS.	MASTERS.	TONS.	WHERE BUILT.	YEAR.	HAUL FROM.	WHERE FROM.	WHERE TO.	DISASTERS.	VESSEL PREMIUM	CARGO.	TOTAL.
22	Maid of the Sea.	Stanwood.	601	Bath, Me.	1850	Boston.	London.	Karrackes.	Put in Falmouth dock, Dec. 29.	\$ 4.00	1,000	\$5,000
23	Morning Light.	Johnston.	916	Philadelphia.	1853	Philadelphia.	Bakers Island.	Hamilton Ids.	Put in Apia, Navigators Id., in dist.	16,000	25,000	41,000
24	Mary Washington.	C. W. Clemen.	432	Portland, N.H.	1857	Worcester.	Charleston.	Key West.	Total loss on Elbow Reef, Jan. 11.	83,000	.....	83,000
25	Ocean Monarch (Br.)	J. Archer.	1849	Quebec.	1851	Waldenboro.	Montreal.	Liverpool.	Abandoned, Lat. 40° Lon. 11°, Dec. 14.	82,000	82,000	164,000
26	Ocean Belle.	Brown.	1098	Waldenboro.	1854	New York.	New Orleans.	Liverpool.	Ab. nr. Marquesa Key, off at Key West.	21,000	15,000	36,000
27	Ohio.	McLean.	590	Medford.	1849	New York.	Manassas.	Norfolk.	Jett. Cargo, 1st. ruled, 43° off at Key West.	7,000	10,000	17,000
28	Parthenon.	E. Hammond.	873	Boston.	1849	New York.	Manassas.	Norfolk.	Ab. at French Reef, off at Key West.	2,400	2,400	4,800
29	Plymouth Rock.	Peares.	1352	Boston.	1852	Boston.	Liverpool.	London.	Ab. at Margate Reef, off at London leaky.	7,500	15,500	23,000
30	Queen of the Seas.	Robinson.	1196	Thomaston.	1855	Thomaston.	London.	Shanghai.	Found in Straits of Formosa, Sept. 21.	73,000	15,000	88,000
31	Rosa (Br.).	Blair.	757	Portland, N.H.	1847	New York.	Manassas.	Liverpool.	Abandoned, Lat. 43° Lon. 43°, Dec. 13.	55,000	110,000	165,000
32	St. Jacobs.	Robinson.	1200	Bath.	1847	New York.	Boston.	Liverpool.	Dam. by fire at Boreham, Nov. 21.	12,000	.....	12,000
33	Saratoga.	W. Glend.	1193	Medford.	1846	New York.	Manassas.	Liverpool.	Ab. nr. Creek Haven Bay, Nov. 18.	50,000	8,000	58,000
34	Silver Star.	Osby.	826	Bath.	1846	New York.	Manassas.	Liverpool.	Total loss at Jarvis Id., Nov. 18.	50,000	.....	50,000
35	Virginia Barge.	Hartbridge.	768	Kennebunk.	1840	Boston.	Richmond.	Liverpool.	Put in Bermuda, 178 cargo shifted &c.	10,000	12,000	22,000
36	Waban.	Tratt.	672	Bath, Me.	1845	Bath.	St. George, N.D.	Bristol, E.	Put in Mauritius, in distress, Nov. 4.	7,000	2,000	9,000
37	Wm. D. Sewell.	Tratt.	672	Bath, Me.	1845	Bath.	St. George, N.D.	Bristol, E.	Jett. Cargo, 185, 1st 518, &c. at Bristol.	5,000	2,500	7,500
Total.												\$375,500 \$320,000 \$1,395,500
15	Allers.	Doer.	360	Tonham, L. I.	1844	Danvers.	Rong Kong.	Manilla.	Leaky at Manilla, rice cargo to repair.	\$4,000	.....	\$4,000
16	Anna.	Tadlow.	697	Port Jefferson.	1844	New York.	Androssen.	Boston.	Col. on G. B. ships with ship, —, nr. P. V. n.	5,000	.....	5,000
17	Anne Hall (Br.).	Hall.	280	Princeton, N.J.	1852	Boston.	New Orleans.	New York.	Jett. cargo, leaky, lost bulwarks &c.	5,000	5,000	10,000
18	Bon Haller.	Hall.	349	Cheshire, Dist.	1852	Philadelphia.	New Orleans.	Philadelphia.	Put in Key West, leaky, discharged.	7,000	.....	7,000
19	Chas. E. Lee.	Almida.	197	Philadelphia.	1852	Philadelphia.	St. Domingo.	Philadelphia.	Total loss at Long Cay, W. I., Jan. 6.	2,000	6,000	8,000
20	Clifton (Br.).	Baker.	556	New Scotland.	1855	Liverpool.	New York.	Liverpool.	In Gale, Lat. 39° Lon. 78°, jett. back, N.Y.	4,000	0,000	4,000
21	Elizabeth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	At Hamilton Roads, in dist. Jan. 14.	4,000	0,000	4,000
22	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Col. Sun. Saxon's put in Caves, Dec. 30.	1,000	.....	1,000
23	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Aband. Lat. 47° Lon. 41°, Dec. 10.	6,000	0,000	6,000
24	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Total loss near Marganama, Jan. 4.	6,000	5,000	11,000
25	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	At Kusaie, Jan. 4, leaky, Dec. 20.	5,000	0,000	5,000
26	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Abandoned, Lat. 48° Lon. 48°, Dec. 18.	15,000	8,000	23,000
27	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
28	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
29	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
30	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
31	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
32	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
33	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
34	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
35	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
36	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
37	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
38	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
39	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
40	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
41	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
42	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
43	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
44	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
45	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
46	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
47	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
48	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
49	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
50	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
51	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
52	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
53	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
54	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
55	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
56	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
57	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
58	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
59	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
60	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
61	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
62	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
63	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
64	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
65	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
66	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
67	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
68	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
69	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
70	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
71	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
72	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
73	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
74	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
75	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
76	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
77	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
78	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
79	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
80	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
81	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
82	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
83	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
84	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
85	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
86	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
87	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
88	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
89	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
90	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
91	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.	15,000	2,000	17,000
92	Falmouth (Br.).	Ellis.	243	New Scotland.	1855	Liverpool.	Alexandria, E.	Falmouth, E.	Put in Portland, E., in dist. Dec. 24.			

DATE.	BARNS.	MASTERS.	RESID.	WHERE BUILT.	YEAR.	HAUL FROM.	WHERE FROM.	WHERE TO.	DISASTERS.	VESSEL AND FREIGHT.	CARGO.	TOTAL.
84 Pauline.	.....	John Steen.	.....	.....	.....	New Bedford.	.....	Walling.	Total loss on reef, at Lahaina, Nov. 14.	\$34,000	\$5,000	\$39,000
84 Pioneer.	.....	F. Gullik.	.....	.....	.....	New Bedford.	.....	Liverpool.	Struck in Dinnama Bay, a. Quenafn.	2,500	2,500	5,000
84 Rambler.	(Br.)	McKenzie.	.....	.....	.....	Pictou, N. S.	.....	Providence.	At St. Thomas in dist. Jan. 6, (coal)	5,000	5,000	10,000
84 Uncle Sam.	.....	.....	.....	.....	.....	Charleston.	.....	Boston.	Collision, —, sunk 60 m. E. Abaco, Jan. 8.	18,000	50,000	68,000
84 V. L. C.	.....	.....	.....	.....	.....	Victoria.	.....	Portland.	Total loss in Straits of Fies.	14,000	15,000	29,000
84 V. L. C.	.....	.....	.....	.....	.....	1802 San Francisco.	.....	Portland.	Total loss on St. Anna Island, Dec.	14,000	5,000	19,000
84 V. L. C.	.....	.....	.....	.....	.....	1803 Philadelphia.	.....	Philadelphia.	Total loss at Horeford Inlet, Jan. 11.	14,000	.....	14,000
84 V. L. C.	.....	.....	.....	.....	.....	1803 New York.	.....	San Francisco.	Ar. at San Francisco, dam. dett. cargo.	1,200	1,000	2,200
84 W. B. E. Scammon.	.....	Cadmont.	.....	.....	.....	Port London.	.....	San Francisco.	.....	.....	.....	.....
99 Barbs. Total.										\$244,000	\$173,500	\$417,500
14 Adhros.	.....	Small.	.....	.....	.....	Portland.	.....	New York.	Aband. Lat. 92° Lon. 73° Feb. 15.	\$2,500	.....	\$2,500
14 B. B. B.	.....	Blanchard.	.....	.....	.....	Bonair.	.....	Boston.	Aband. at Newport Beach, L. I.	8,500	.....	8,500
14 Alce Franklin.	(Br.)	Clements.	.....	.....	.....	Androsan.	.....	New York.	Put in Bermuda, a. b. split, Dec. 22, a. N. Y.	2,500	.....	2,500
14 Alce.	(Br.)	Singsby.	.....	.....	.....	London.	.....	Malta.	Abandoned 20 m. S. of Edgystone.	4,000	18,000	22,000
14 Conquest.	(Spain)	Janan.	.....	.....	.....	London.	.....	New York.	Total loss at Morghos, L. I., Jan. 5.	10,000	5,000	15,000
14 Haman.	.....	McEwen.	.....	.....	.....	Newfoundland.	.....	Malaga.	Abandoned Lat. 43° Lon. 85° Jan. 17.	3,500	7,000	10,500
14 H. C. Brook.	.....	J. S. Merrill.	.....	.....	.....	St. John.	.....	New York.	At Fortune Island, leaky, Jan. 8.	3,000	4,000	7,000
14 Mary Weir.	(Br.)	Compt.	.....	.....	.....	New York.	.....	New York.	Abandoned, Lat. 37° Lon. 12° Dec. 18.	5,000	15,000	20,000
14 Mary Weir.	(Br.)	Walker.	.....	.....	.....	London.	.....	Cork.	At Wilmington, N. C., in distress.	2,500	12,000	14,500
14 Quickstep.	(Br.)	Henry.	.....	.....	.....	Cardenas.	.....	London.	Abandoned, Lat. 38° Lon. 89° Dec. 23.	2,500	25,000	27,500
14 Tornado.	.....	Tibbets.	.....	.....	.....	Trinidad, Cuba.	.....	New Orleans.	At St. Thomas in distress, Jan. 10.	8,000	5,000	13,000
13 Belgs. Total.										\$57,600	\$50,000	\$107,600
15 Adla.	.....	.....	.....	.....	.....	New York.	.....	Aspinwall.	Found, Lat. 85° Lon. 70° Dec. 4, (coal).	\$7,000	\$3,500	\$10,500
15 Adla.	.....	.....	.....	.....	.....	Richmond.	.....	Rio Janeiro.	Aband. Lat. 37° Lon. 65° Nov. 6.	5,000	.....	5,000
15 Adla.	.....	.....	.....	.....	.....	Savannah.	.....	New Bedford.	Aband. Lat. — Lon. — Nov. 27.	7,500	15,000	22,500
15 Adla.	.....	.....	.....	.....	.....	N. Pacific Cal.	.....	San Francisco.	Put in Norfolk in dist. collision, Jan. 9.	1,000	.....	1,000
15 Adla.	.....	.....	.....	.....	.....	Richmond.	.....	San Francisco.	Total loss on rocks at San Juan, P. C.	5,000	5,000	10,000
15 Adla.	.....	.....	.....	.....	.....	Richmond.	.....	San Francisco.	At St. Thomas, leaky, off.	2,500	1,000	3,500
15 Adla.	.....	.....	.....	.....	.....	Richmond.	.....	San Francisco.	Aband. in Gibraltar Bay, off.	2,500	2,500	5,000
15 Adla.	.....	.....	.....	.....	.....	Richmond.	.....	San Francisco.	Put in Norfolk in dist. Jan. 4.	1,000	1,000	2,000
15 Adla.	.....	.....	.....	.....	.....	Richmond.	.....	San Francisco.	Sunk by ice near Haves de Grace.	1,000	1,000	2,000
15 Adla.	.....	.....	.....	.....	.....	Richmond.	.....	San Francisco.	Put back to W. best sails, deck load dec.	1,000	1,000	2,000
15 Adla.	.....	.....	.....	.....	.....	Richmond.	.....	San Francisco.	Put in Savannah in dist. Dec. 31.	2,500	4,000	6,500
15 Adla.	.....	.....	.....	.....	.....	Richmond.	.....	San Francisco.	Aband. on Cape Fear, off.	500	.....	500
15 Adla.	.....	.....	.....	.....	.....	Richmond.	.....	San Francisco.	Aband. on Long Beach, N. J., total loss.	4,000	1,000	5,000

MARINE LOSSES.—JANUARY 1861. (CONTINUED).

SCHOONERS.	MASTERS.	TONS.	WHERE BUILT.	DATE.	HAIL FROM.	WHERE FROM.	WHERE TO.	DISASTERS.	VESSEL AND FRIGHT.	CARGO.	TOTALS.
22 Howard Putnam.	Morrill,	121	Yarmouth N. S.	1856	Yarmouth,	Angrilla,	New York,	At St Thomas, leaky, Jan. 9,	\$1,800	\$1,000	\$2,800
23 Independence.	Smith,	100	Orrington Me.	1857	Yarmouth,	Baigor,	New Bedford,	Total loss at Hyannis, Dec.	2,500	300	2,800
24 J. W. Roche.	Rogers,	241	Belleilles, N. J.	1854	Norfolk, Va.,	Savannah,	New Bedford,	Put in Charleston for rep. Dec. 25,	8,500	1,500	10,000
25 Julia Grace.	Chase,	118	Maline,	1853	Oreland, Me.,	Oreland,	New York,	Asht. on Hazards Beach, Newport,	2,500	2,000	4,500
26 J. H. Hammon, (Br.)	Watney,	375	Detroit,	1854	.....	Bedouque, P. E. I.	Liverpool,	Total loss, Ship Harbor, N. S., Dec. 20,	5,000	4,000	9,000
27 Lamerline.	Peeling,	135	Camden, Me.,	1847	Gardner, Me.,	Boston,	Jacksonville,	Asht. at Belmont, condemned,	1,500	.....	1,500
28 Lucy Ames.	Holbrook,	138	Rockland,	1849	Rockland,	Rockland,	New York,	Asht. at Tarpanin Cove, off,	500	.....	500
29 Matchless.	Huckley,	249	New London,	1854	New London,	Rio Grande,	New York,	Total loss on Cape St. Roque, Nov. 24,	10,000	5,000	15,000
30 Maada, (Br.)	Seagle,	298	Shelds,	1854	Hadfias, N. S.,	Quebec,	Guineaster, (E)	Abandoned, Lat. 51° Lon. 25°, Jan. 9,	7,500	4,000	11,500
31 Moss.	Matthewson	113	Essex Me.,	1850	Provincetown,	Boston,	Aux Cayes,	Total loss on Swan Is., Dec. 9,	3,500	5,000	8,500
32 Arianna.	A. Thacher,	220	Baltimore,	1849	Middlestown,	Malanza,	Cork,	Asht. Blackwood Bay, Cay Rf. Nassau,	5,000	3,000	8,000
33 Surveyor.	Falson	.....	.....	.....	.....	Bath,	Boston,	Aband. Lat. 40° Lon. 70°, Dec. 14,	1,000	500	1,500
Totals.									\$37,000	\$53,100	\$150,000

25 Schooners. Totals.

ANALYSIS OF MARINE DISASTERS FOR JANUARY, 1861.

The following is a reliable analysis of the Marine Losses of the month of January, 1861; showing the whole number of—1. Total losses.—2. Disasters from Collisions.—3. Abandoned.—4. Stranded.—5. From Fire.—6. Put Back, &c.

JANUARY 1861.	WHOLE NO. OF DISASTERS REPORTED.	TOTAL LOSSES.	COLLISION.	ABANDONED.	STRANDED.	FIRE.	PUT BACK.	PUT IN OTHER PORTS IN DISTRESS.	DAMAGED OR VOYAGE.
6 STEAMERS.	6	4	..	..	2	1	..	1	..
28 SHIPS.	88	17	..	6	10	8	2	7	6
30 BARKS.	29	7	3	3	8	..	1	9	6
13 BRIGS.	19	6	..	6	8	..	..	4	1
25 SCHOONERS.	25	13	1	5	11	..	1	7	..
Totals.	110	46	4	20	34	4	4	23	13

MARINE LOSSES FOR FEBRUARY, 1861.

* * * The first column refers to the dates of the New York papers wherein full information of the disasters can be obtained.

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NAME.	RAKES.	MASTERS.	TONS.	WHERE BUILT.	TRADE.	WHERE OWNED.	WHERE FROM.	WHERE TO.	DISASTERS.	Y. BUILT AND PRESENT.	CARGO.	TOTAL.
18 A. J. Fulton (Br.)	Loyell,	605 Yarmouth,	1850	Yarmouth,	1850	Yarmouth,	Boston,	St. Johns, N.B.	Tot. loss on Plummer's Isl. Me. (Br.), Jan.	\$30,000	21,000	\$50,000
19 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	New York,	York,	Abandoned at sea, Jan. 13.	7,000	21,000	28,000
20 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Rio Janeiro,	Abandoned, Lat. 21° Lon. 72° Jan. 1.	90,000	26,000	56,000
21 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 38° Lon. 74° Jan. 12.	17,000	25,000	42,000
22 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
23 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
24 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
25 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
26 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
27 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
28 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
29 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
30 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
31 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
32 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
33 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
34 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
35 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
36 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
37 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
38 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
39 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
40 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
41 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
42 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
43 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
44 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
45 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
46 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
47 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
48 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
49 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
50 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
51 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
52 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
53 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
54 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
55 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
56 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
57 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
58 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
59 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
60 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
61 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
62 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
63 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
64 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
65 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
66 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
67 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
68 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
69 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
70 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
71 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
72 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
73 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
74 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
75 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
76 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
77 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
78 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
79 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
80 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
81 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
82 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
83 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
84 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
85 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
86 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
87 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
88 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
89 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
90 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
91 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
92 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
93 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
94 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
95 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
96 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
97 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
98 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
99 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
100 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
101 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
102 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
103 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
104 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.	10,000	25,000	35,000
105 A. J. Fulton (Br.)	Loyell,	257 Florence,	1848	Yarmouth,	1848	Yarmouth,	Baltimore,	Liverpool,	Abandoned, Lat. 45° Lon. 30° Jan. 14.			

DATE	SCHOONERS.	MASTERS.	TONS.	WHERE BUILT.	WEATHER.	WHERE OWNED.	WHERE FROM.	WHERE TO.	DETAILS.	VEHICLE AND FREIGHT.	CARGO.	TOTAL.
27	Chas. T. Strong	Liecum	246	Patchogue,	1852	New York,	Baltimore,	New York,	Col. and sunk near Wolf Trap, Feb. 17,	\$6,000	\$2,400	\$8,400
28	Darius Ireland	Baker	292	Old Harbor,	1858	Gr. Eagle Harbor,	Middle,	Providence,	Total loss on Normans Land, Feb. 8,	10,000	15,000	\$25,000
29	Everglade	Howell	136	Blushill,	1858	Newburyport,	Turkey Island,	Boston,	Total loss on Hog Island, Feb. 1,	8,000	4,000	12,000
30	Emile	Howell	136	Blushill,	1858	Newburyport,	Norfolk,	New York,	Total loss on Sand Shoals, Feb. 7,	7,000	10,500	17,500
31	Ellis Baker	Howell	136	Blushill,	1858	Newburyport,	Wilmington,	New York,	Shore on Cold Spring bar, Feb. 26,	1,000	1,500	2,500
32	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
33	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
34	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
35	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
36	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
37	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
38	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
39	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
40	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
41	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
42	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
43	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
44	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
45	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
46	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
47	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
48	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
49	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500
50	Emile	Howell	136	Blushill,	1858	Newburyport,	Elizabethport,	Boston,	Put into Holmes Hole, leaky, Feb. 2,	7,500	5,000	12,500

RECAPITULATION OF MARINE LOSSES FOR FEBRUARY, 1861.

VEHICLE AND FREIGHT.	CARGO.	TOTAL.
\$152,200	\$275,000	\$427,200
420,000	1,187,500	1,607,500
202,000	370,000	572,000
87,500	81,500	169,000
118,000	104,700	222,700
\$955,000	\$1,448,700	\$2,403,700

80

THE TARIFF ACT OF THE UNITED STATES.

Approved February 28, 1861.

AN ACT to provide for the payment of outstanding Treasury notes, to authorize a loan, to regulate and fix the duties on imports and for other purposes :

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that the President of the United States be, and hereby is, authorized at any time within twelve months from the passage of this act, to borrow, on the credit of the United States, a sum not exceeding ten millions of dollars, or so much thereof as, in his opinion, the exigencies of the public service may require, to be applied to the payment of appropriations made by law, and the balance of Treasury notes now outstanding, and no other purposes, in addition to the money received, or which may be received, into the Treasury from other sources; *Provided*, that no stipulation or contract shall be made to prevent the United States from reimbursing any sum borrowed under the authority of this act at any time after the expiration of ten years from the first day of July next, by the United States giving three months' notice, to be published in some newspaper published at the seat of Government, of their readiness to do so; and no contract shall be made to prevent the redemption of the same at any time after the expiration of twenty years from the said first day of July next without notice.

Sec. 2. *And be it further enacted*, That stock shall be issued for the amount so borrowed, bearing interest not exceeding six per centum per annum; and the Secretary of the Treasury be, and is hereby authorized, with the consent of the President, to cause certificates of stock to be prepared, which shall be signed by the Register and sealed with the seal of the Treasury Department, for the amount so borrowed, in favor of the parties lending the same, or their assigns, which certificates may be transferred on the books of the Treasury, under such regulations as may be established by the Secretary of the Treasury; *Provided*, that no certificate shall be issued for a less sum than one thousand dollars; and *Provided*, also, that whenever required, the Secretary of the Treasury may cause coupons of semi-annual interest payable thereon to be attached to certificates issued under this act; and any certificate with such coupons of interest attached, may be assigned and transferred by delivery of the same, instead of being transferred on the books of the Treasury.

Sec. 3. *And be it further enacted*, That before awarding any of said loan, the Secretary of the Treasury shall, as the exigencies of the public service require, cause to be inserted in two of the public newspapers of the city of Washington, and in one or more public newspapers in other cities of the United States, public notice that sealed proposals for so much of said loan as is required, will be received until a certain day, to be specified in such notice, not less than thirty days from its first insertion in a Washington newspaper; and such notice shall state the amount of the loan, at what periods the money shall be paid, if by instalments, and at what places. Such sealed proposals shall be opened on the day appointed in the notice, in the presence of such persons as may choose to attend, and the proposals decided on by the Secretary of the Treasury, who shall accept the most favorable offered by responsible bidders for said stock. And the said Secretary shall report to Congress, at the commencement of the next session, the amount of money borrowed under this act, and of whom and on what terms it shall have been obtained, with an abstract or brief statement of all the proposals submitted for the same, distinguishing between those accepted and those rejected, with a detailed statement of the expense of making such loans; *Provided*, that no stock shall be disposed of at less than its par value: *And provided, further*, That no part of the loan hereby authorized shall be applied to the service of the present fiscal year.

Sec. 4. *And be it further enacted*, That in case the proposals made for said loan, or for so much thereof as the exigencies of the public service shall require, shall not be satisfactory, the President of the United States shall be, and hereby is, authorized to decline to accept such offer if for less than the par value of the bonds constituting the said stock, and in lieu thereof, and to the extent and amount of the loan authorized to be made by this act, to issue Treasury notes for sums not less than fifty dollars, bearing interest at the rate of six per centum per annum, payable semi-annually on the first days of January and July in each year, at proper places of payment, to be prescribed by the Secretary, with the approval of the President; and, under the like circumstances and conditions, the President of the United States is hereby authorized to substitute Treasury notes of equal amount for the whole or any part of any of the loans for which he is now by law authorized to contract and issue bonds. And the Treasury notes so issued under the authority herein given shall be received in payment for all debts due to the United States when offered, and in like manner shall be given in payment for any sum due from the United States when payment in that mode is requested by the person to whom payment is to be made, or for their par value in coin. And the faith of the United States is hereby pledged for the due payment of the interest and the redemption of the principal of the stock or Treasury notes which may be issued under the authority of this act; and the sum of twenty thousand dollars is hereby appropriated, out of any money in the Treasury not otherwise appropriated, to pay the expenses of preparing the certificates of stock or Treasury notes herein authorized, to be done in the usual mode and under the restrictions as to employment and payment of officers contained in the laws authorizing former loans and issues of Treasury notes; and it shall be at the option of holders of the Treasury notes hereby authorized by this act to exchange the same for the stock herein authorized, at par, or for bonds, in lieu of which

said Treasury notes were issued: *Provided*, That no certificate shall be exchanged for Treasury notes or bonds in sums less than five hundred dollars: *And provided further*, That the authority to issue the said Treasury notes, or give the same in payment for debts due from the United States, shall be limited to the thirtieth day of June, eighteen hundred and sixty-two; and that the same may be redeemable at the pleasure of the United States, at any time within two years after the passage of this act; and that said notes shall cease to bear interest after they shall have been called in by the Secretary of the Treasury under the provisions of this act.

Sec. 5. And be it further enacted, That from and after the first day of April, Anno Domini eighteen hundred and sixty-one, in lieu of the duties heretofore imposed by law on the articles hereinafter mentioned, and on such as may now be exempt from duty, there shall be levied, collected, and paid, on the goods, wares, and merchandize, herein enumerated and provided for, imported from foreign countries, the following duties and rates of duty, that is to say:—

First. On raw sugar, commonly called muscovado, or brown sugar, not advanced beyond the raw state by claying or other process; and on syrup of sugar, or of sugar cane, and concentrated molasses, or concentrated melado, and on white and clayed sugars, when advanced beyond the raw state by claying or other process, and not refined, three-fourths of one cent per pound.

On refined sugars, whether loaf, lump, crushed, or pulverized, two cents per pound.

On sugars, after being refined, when they are tinctured, colored, or in any way adulterated, and on sugar candy, four cents per pound.

Provided, That all syrups of sugar, or of sugar cane, concentrated molasses or melado, entered under the name of molasses, or any other name than syrup of sugar, or of sugar cane, concentrated molasses or, concentrated melado, shall be liable to forfeiture to the United States; on molasses, two cents per gallon; on confectionary of all kinds, not otherwise provided for, thirty per centum ad valorem.

Sec. 6. And be it further enacted, That from and after the day and year aforesaid there shall be levied, collected, and paid, on the importation of the articles hereinafter mentioned, the following duties. that is to say:—

First, On brandy, for first proof, one dollar per gallon.

On other spirits manufactured or distilled from grain, for first proof, forty cents per gallon.

On spirits from other materials, for first proof, forty cents per gallon.

On cordials and liquors of all kinds, fifty cents per gallon.

On arrack, absynthe, kirschenwasser, ratafia, and other similar spirituous beverages not otherwise provided for, fifty cents per gallon.

On bay rum, twenty-five cents per gallon.

Provided, That the duty upon brandy spirits, and all other spirituous beverages herein enumerated, shall be collected upon the basis of first proof, and so in proportion for any greater strength than the strength of first proof; on wines of all kinds, forty per centum ad valorem: *Provided*, That all imitations of brandy or spirits, or of any of the said wines, and all wines imported by any names whatever, shall be subject to the duty provided for the genuine article which it is intended to represent.

Provided, further, That brandies, or other spirituous liquors may be imported in bottles, when the package shall contain not less than one dozen, and all bottles shall pay a separate duty, according to the rate established by this act, whether containing wines, brandies, or other spirituous liquors, subject to duty as hereinbefore mentioned.

On ale, porter and beer in bottles, twenty-five cents per gallon, otherwise than in bottles, fifteen cents per gallon.

On all spirituous liquors not enumerated, thirty-three and one-third per centum ad valorem.

Second, On segars of all kinds, valued at five dollars or under per thousand, twenty cents per pound; over five dollars and not over ten, forty cents per pound, and over ten dollars, sixty cents per pound; and, in addition thereto, ten per centum ad valorem.

On snuff, ten cents per pound.

On unmanufactured tobacco in leaf, twenty-five per centum ad valorem.

On all other manufactured or unmanufactured tobacco, thirty per centum ad valorem.

Sec. 7. *And be it further enacted,* That from and after the day and year aforesaid there shall be levied, collected and paid on the importation of the articles hereinafter mentioned, the following duties, that is to say:—

First, On bar iron, rolled or hammered, comprising flats, not less than one inch or more than seven inches wide, nor less than one-quarter of an inch or more than two inches thick; rounds, not less than one-half an inch or more than four inches in diameter; and squares, not less than one half an inch, or more than four inches square, fifteen dollars per ton.

Provided, That all iron in slabs, blooms, loops, or other forms, less finished than iron in bars, and more advanced than pig iron, except castings, shall be rated as iron in bars, and pay a duty accordingly.

And provided, further, That none of the above iron shall pay a less rate of duty than twenty per centum ad valorem.

On all iron imported in bars for railroads or inclined planes, made to patterns, and fitted to be laid down upon such roads or planes without further manufacture, and not exceeding six inches high, twelve dollars per ton.

On boiler plate iron, twenty dollars per ton; on iron wire, drawn and finished, not more than one-fourth of one inch in diameter, nor less than number sixteen wire gage, seventy-five cents per one hundred pounds, and fifteen per centum ad valorem.

Over number sixteen and not over number twenty-five wire gage, one dollar and fifty cents per one hundred pounds, and in addition fifteen per centum ad valorem.

Over or finer than number twenty-five wire gage two dollars per one hundred pounds, and in addition fifteen per centum ad valorem.

On all other descriptions of rolled or hammered iron, not otherwise provided for, twenty dollars per ton.

Second, On iron in pigs, six dollars per ton; on vessels of cast iron, not otherwise provided for, and on sad irons, tailors and hatters' irons, stoves and stove plates, one cent per pound.

On cast iron steam, gas and water pipe, fifty cents per one hundred pounds.

On cast iron butts and hinges, two cents per pound.

On hollow ware, glazed or tinned, two cents and a half per pound.

On all other castings of iron, not otherwise provided for, twenty-five per centum ad valorem.

Third, On old scrap iron, six dollars per ton.

Provided, That nothing shall be deemed old iron that has not been in actual use, and fit only to be remanufactured.

Fourth, On band and hoop iron, slit rods, not otherwise provided for, twenty dollars per ton.

On cut nails and spikes one cent per pound.

On iron cables or chains, or parts thereof, and anvils, one dollar and twenty-five cents per one hundred pounds.

On anchors, or parts thereof, one dollar and fifty cents per one hundred pounds.

On wrought board nails, spikes, rivets and bolts, two cents per pound.

On bed screws and wrought hinges, one cent and a half per pound.

On chains, trace chains, halter chains and fence chains, made of wire or rods one-half of one inch in diameter or over, one cent and a half per pound; under one-half of one inch in diameter, and not under one-fourth of one inch in diameter, two cents per pound; under one-fourth of one inch in diameter, and not under number nine wire gage, two cents and a half per pound; under number nine wire gage, twenty-five per centum ad valorem.

On blacksmiths' hammers and sledges, axles, or parts thereof, and malleable iron in castings, not otherwise provided for, two cents per pound.

On horse-shoe nails, three cents and a half per pound.

On steam, gas and water tubes and flues of wrought iron, two cents per pound.

On wrought iron railroad chairs, and on wrought iron nuts and washers, ready punched, twenty-five dollars per ton.

On cut tacks, brads and sprigs, not exceeding sixteen ounces to the thousand, two cents per thousand, exceeding sixteen ounces to the thousand, two cents per pound.

Fifth. On smooth or polished sheet iron, by whatever name designated, two cents per pound; on other sheet iron, common or black, not thinner than number twenty wire gage, twenty dollars per ton; thinner than number twenty, and not thinner than number twenty-five wire gage, twenty-five dollars per ton; thinner than number twenty-five wire gage, thirty dollars per ton.

On tin plates galvanized, galvanized iron, or iron coated with zinc, two cents per pound.

On mill irons and mill cranks of wrought iron, and wrought iron for ships, locomotives, locomotive tire, or parts thereof, and steam engines, or parts thereof, weighing each twenty-five pounds or more, one cent and a half per pound.

On screws, commonly called wood screws, two inches or over in length, five cents per pound; less than two inches in length, eight cents per pound.

On screws washed or plated, and all other screws of iron or any other metal, thirty per centum ad valorem.

On all manufactures of iron not otherwise provided for, thirty per centum ad valorem.

Sixth. On all steel in igots, bars, sheets, or wire, not less than one-fourth of one inch in diameter, valued at seven cents per pound, or less, one and a half cent per pound; valued at above seven cents per pound, and not above eleven cents per pound, two cents per pound.

Steel in any form, not otherwise provided for, shall pay a duty of twenty per centum ad valorem.

On steel wire less than one-fourth of an inch in diameter, and not less than number sixteen wire gage, two dollars per one hundred pounds, and in addition thereto fifteen per centum ad valorem; less or finer than number sixteen wire gage, two dollars and fifty cents per one hundred pounds, and in addition thereto fifteen per centum ad valorem.

On cross-cut saws, eight cents per lineal foot.

On mill-pit and drag saws, not over nine inches wide, twelve and a half cents per lineal foot; over nine inches wide, twenty cents per lineal foot.

On skates costing twenty cents, or less, per pair, six cents per pair; on those costing over twenty cents per pair, thirty per centum ad valorem.

On all manufactures of steel, or of which steel shall be a component part, not otherwise provided for, thirty per centum ad valorem.

Provided, That all articles partially manufactured, not otherwise provided for, shall pay the same rate of duty as if wholly manufactured.

Seventh. On bituminous coal, one dollar per ton of twenty-eight bushels, eighty pounds to the bushel; on all other coal, fifty cents per ton of twenty-eight bushels, eighty pounds to the bushel.

On coke and culm of coal, twenty-five per centum ad valorem.

Sec. 8. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid on the importation of the articles hereinafter mentioned the following duties, that is to say:—

First. On lead, in pigs and bars, one cent per pound.

On old scrap lead, fit only to be remanufactured, one cent per pound.

On lead in sheets, pipes, or shot, one cent and a half per pound.

On pewter, when old and fit only to be remanufactured, one cent per pound.

Second. On copper, in pigs, bars, or ingots, two cents per pound.

On copper, when old and fit only to be remanufactured, one cent and a half per pound.

On sheathing copper, in sheets forty-eight inches long and fourteen inches wide, and weighing from fourteen to thirty-four ounces the square foot, two cents per pound.

On copper rods, bolts, nails, spikes, copper bottoms, copper in sheets or plates, called braziers' copper, and other sheets of copper not otherwise provided for, twenty-five per centum ad valorem.

On zinc, spelter, or teutenegue, manufactured, in blocks, or pigs, one dollar per hundred pounds.

On zinc, spelter, or teutenegue, in sheets, one cent and a half per pound.

Sec. 9. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid on the importation of the articles hereinafter mentioned the following duties, that is to say:—

First. On white lead and oxide of zinc, dry or ground in oil, red lead, and litharge, one cent and a half per pound.

On sugar of lead or acetate of lead and nitrate of lead, chromate and bichromate of potash, three cents per pound.

On hydriodate, and prussiate of potash, and chromic acid, and salts of iodine, and resublimed iodine, fifteen per centum ad valorem.

On whiting, twenty-five cents per one hundred pounds.

On Paris white, pipe clay, and ochres or ochrey earths, not otherwise provided for, when dry, thirty-five cents per one hundred pounds; when ground in oil, one dollar and thirty-five cents per one hundred pounds.

On umber, fifty cents per one hundred pounds.

On putty, one cent per pound.

On linseed, flaxseed, hempsseed, and rapeseed oil, twenty cents per gallon.

On kerosine oil, and all other coal oils, ten cents per gallon.

On alum, alum substitute, sulphate of alumina, and aluminous cake, fifty cents per one hundred pounds.

On copperas, green vitrol, or sulphate of iron, twenty-five cents per one hundred pounds.

On bleaching powders, fifteen cents per one hundred pounds.

On refined camphor, six cents per pound.

On refined borax, three cents per pound.

On tallow, one cent per pound.

On tallow candles, two cents per pound.

On spermaceti or wax candles and tapers, and on candles and tapers of spermaceti and wax combined, eight cents per pound.

On stearine candles, and all other candles and tapers, four cents per pound.

On spirits of turpentine, ten cents per gallon.

On opium, one dollar per pound.

On morphine, and its salts, one dollar per ounce.

On liquorice paste or juice, three cents per pound.

Sec. 10. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid on the importation of the articles hereinafter mentioned the following duties, that is to say :

First. On salt, four cents per bushel of fifty-six pounds, provided that salt imported in bags, or not in bulk, shall pay a duty of six cents per bushel of fifty-six pounds.

On bristles, four cents per pound.

On honey ten cents per gallon.

On vinegar, six cents per gallon.

On mackerel, two dollars per barrel.

On herrings, pickled or salted, one dollar per barrel.

On pickled salmon, three dollars per barrel.

On all other fish pickled in barrels, one dollar and fifty cents per barrel.

On all other foreign caught fish imported otherwise than in barrels or half barrels, or whether fresh, smoked, or dried, salted or pickled, not otherwise provided for, fifty cents per one hundred pounds.

Second. On beef and pork, one cent per pound; on hams and bacon, two cents per pound.

On cheese, four cents per pound.

On wheat, twenty cents per bushel.

On butter, four cents per pound; on lard, two cents per pound.

On rye and barley, fifteen cents per bushel.

On Indian corn or maize, ten cents per bushel.

On oats, ten cents per bushel.

On potatoes, ten cents per bushel.

On cleaned rice, one cent per pound; on uncleaned rice or paddy, fifty cents per one hundred pounds.

On sago and sago flour, fifty cents per one hundred pounds.

On flaxseed or linseed, sixteen cents per bushel of fifty-two pounds.

On hemp and rapeseed, ten cents per bushel of fifty-two pounds.

On raw hides and skins of all kinds, whether dried, salted, or pickled, not otherwise provided for, five per centum ad valorem.

Sec 11. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid on the importation of the articles hereinafter mentioned the following duties, that is to say :

First. On cassia, four cents per pound; on cassia buds, eight cents per pound.

On cloves, four cents per pound.

On pepper, two cents per pound; on Cayenne pepper, three cents per pound; on ground Cayenne pepper, four cents per pound.

On pimento, two cents per pound.

On cinnamon, ten cents per pound.

On mace and nutmegs, fifteen cents per pound.

On prunes, two cents per pound.

On plums, one cent per pound.

On dates, one-half of one cent per pound.

On currants, two cents per pound.

On figs, three cents per pound.

On sultana, muscatel, and bloom raisins, either in boxes or jars, two cents per pound; on all other raisins, one cent per pound.

On almonds, two cents per pound; on shelled almonds, four cents per pound.

On all nuts not otherwise provided for, except those used for dyeing, one cent per pound.

Sec. 12. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid on the importation of the articles hereinafter mentioned the following duties, that is to say :

First. On all wool unmanufactured, and all hair of the alpaca, goat, and other like animals, unmanufactured, the value whereof at the last port or place from whence exported to the United States, shall be less than eighteen cents per pound, five per centum ad valorem; exceeding eighteen cents per pound, and not exceeding twenty-four cents per pound, there shall be levied, collected, and paid a duty of three cents per pound; exceeding twenty-four cents per pound, there shall be levied, collected, and paid a duty of nine cents per pound.

Provided, That any wool of the sheep, or hair of the alpaca, the goat, and other like animals, which shall be imported in any other than the ordinary condition, as now and heretofore practiced, or which shall be changed in its character or condition for the purpose of evading the duty, or which shall be reduced in value by the admixture of dirt or any foreign substance to eighteen cents per pound, or less, shall be subject to pay a duty of nine cents per pound, anything in this act to the contrary notwithstanding.

Provided, also, That when wool of different qualities is imported in

the same bale, bag, or package, and the aggregate value of the contents of the bale, bag, or package shall be appraised by the appraisers at a rate exceeding twenty-four cents per pound, it shall be charged with a duty of nine cents per pound.

Provided, further, That if bales of different qualities are embraced in the same invoice, at the same price, whereby the average price shall be lessened more than ten per centum, the value of the whole shall be appraised according to the value of the bale of the best quality, and no bale or bales shall be liable to a less rate of duty in consequence of being invoiced with wool of lower value.

Provided, also, That sheep skins, raw or unmanufactured, imported with the wool on, washed or unwashed, shall be subject to a duty of fifteen per centum ad valorem.

Sec. 13. *And be it further enacted,* That from and after the day and year aforesaid there shall be levied, collected, and paid on the importation of the articles hereinafter mentioned the following duties, that is to say :

First. On Wilton, Saxony, and Aubusson Axminster patent velvet, Tournay velvet, and tapestry velvet carpets and carpeting, Brussels carpets wrought by the Jacquard machine, and all medallion or whole carpets, valued at one dollar and twenty-five cents or under per square yard, forty cents per square yard ; valued at over one dollar and twenty-five cents per square yard, fifty cents per square yard.

Provided, That no carpet or rugs of the above description shall pay a duty of less than twenty-five per centum ad valorem.

On Brussels and tapestry Brussels carpets and carpeting printed on the warp or otherwise, thirty cents per square yard.

On all treble-ingrain and worsted-chain Venetian carpets and carpeting, twenty-five cents per square yard.

On hemp or jute carpeting, four cents per square yard.

On druggets, bookings, and felt carpets and carpeting, printed, colored, or otherwise, twenty cents per square yard.

On all other kinds of carpets and carpeting of wool, flax, or cotton, or parts of either, or other material not otherwise specified, a duty of thirty per centum ad valorem.

Provided, That mats, rugs, screens, covers, hassocks, bedsides, and other portions of carpets or carpeting shall pay the rate of duty herein imposed on carpets or carpeting of similar character ; on all other mats, screens, hassocks, and rugs, a duty of thirty per centum ad valorem.

Second. On woollen cloths, woollen shawls, and all manufactures of wool of every description, made wholly or in part of wool, not otherwise provided for, a duty of twelve cents per pound, and in addition thereto twenty-five per centum ad valorem.

On endless belts for paper, and blanketing for printing machines, twenty-five per centum ad valorem.

On all flannels valued at thirty cents or less per square yard, twenty-five per centum ad valorem ; valued above thirty cents per square yard, and on all flannels colored, or printed, or plaided, and flannels composed in part of cotton or silk, thirty per centum ad valorem.

On hats of wool, twenty per centum ad valorem.

On woollen and worsted yarn, valued at fifty cents and not over one dollar per pound, twelve cents per pound, and in addition thereto fifteen per centum ad valorem.

On woollen and worsted yarn, valued at over one dollar per pound, twelve cents per pound, and in addition thereto twenty-five per centum ad valorem.

On woollen and worsted yarns, or yarns for carpets, valued under fifty cents per pound, and not exceeding in fineness number fourteen, twenty-five per centum ad valorem; exceeding number fourteen, thirty per centum ad valorem.

On clothing ready made, and wearing apparel of every description, composed wholly or in part of wool, made up or manufactured wholly or in part by the tailor, seamstress, or manufacturer, twelve cents per pound, and in addition thereto twenty-five per centum ad valorem.

On blankets of all kinds, made wholly or in part of wool, valued at not exceeding twenty-eight cents per pound, there shall be charged a duty of six cents per pound, and in addition thereto ten per centum ad valorem; on all valued above twenty-eight cents per pound, but not exceeding forty cents per pound, there shall be charged a duty of six cents per pound, and in addition thereto twenty-five per centum ad valorem; on all valued above forty cents per pound there shall be charged a duty of twelve cents per pound, and in addition thereto twenty per centum ad valorem.

** On woollen shawls, or shawls of which wool shall be the chief component material, a duty of sixteen cents per pound, and in addition thereto twenty per centum ad valorem.*

Third. On all delaines, Cashmere delaines, muslin delaines, barege delaines, composed wholly or in part of wool, gray or uncolored, and on all other gray or uncolored goods of similar description, twenty-five per centum ad valorem.

On bunting, and on all stained, colored, or printed, and on all other manufactures of wool, or of which wool shall be a component material, not otherwise provided for, thirty per centum ad valorem.

Fourth. On oilcloth, for floors, stamped, painted, or printed, valued at fifty cents or less per square yard, twenty per centum ad valorem; valued at over fifty cents per square yard, and on all other oilcloths, thirty per centum ad valorem.

Sec. 14. *And be it further enacted,* That from and after the day and year aforesaid there shall be levied, collected, and paid on the importation of the articles hereinafter mentioned the following duties, that is to say:

First. On all manufactures of cotton not bleached, colored, stained, painted, or printed, and not exceeding one hundred threads to the square inch, counting the warp and filling, and exceeding in weight five ounces per square yard, one cent per square yard.

On finer or lighter goods of like description, not exceeding one hundred and forty threads to the square inch, counting the warp and filling, two cents per square yard.

On goods of like description, exceeding one hundred and forty threads, and not exceeding two hundred threads to the square inch, counting the warp and filling, three cents per square yard.

On like goods exceeding two hundred threads to the square inch, counting the warp and filling, four cents per square yard.

On all goods embraced in the foregoing schedules, if bleached, there

** This clause and others in italics are stricken out by Supplementary Bill.*

shall be levied, collected, and paid an additional duty of one half of one cent per square yard; and if printed, painted, colored, or stained, there shall be levied, collected, and paid a duty of ten per centum in addition to the rates of duty provided in the foregoing schedules.

Provided, That upon all plain woven cotton goods not included in the foregoing schedules, and upon cotton goods of every description, the value of which shall exceed sixteen cents per square yard, there shall be levied, collected, and paid a duty of twenty-five per centum ad valorem.

And provided, further, That no cotton goods having more than two hundred threads to the square inch, counting the warp and filling, shall be admitted to a less rate of duty than is provided for goods which are of that number of threads.

Second. On spool and other thread of cotton, thirty per centum ad valorem.

Third. On shirts and drawers, wove or made on frames composed wholly of cotton and cotton velvet, twenty-five per centum ad valorem.

And on all manufactures composed wholly of cotton, bleached, unbleached, printed, painted, or dyed, not otherwise provided for, thirty per centum ad valorem.

Fourth. On all brown or bleached linens, ducks, canvass packings, cot-bottoms, burlaps, drills, coatings, brown Hollands, blay linens, damasks, diapers, crash, huckabacks, handkerchiefs, lawns, or other manufactures of flax, jute, or hemp, or of which flax, jute, or hemp, shall be the component material of chief value, being the value of thirty cents and under per square yard, twenty-five per centum ad valorem; valued above thirty cents per square yard, thirty per centum ad valorem.

On flax or linen threads, twine and pack-thread, and all other manufactures of flax, or of which flax shall be the component material of chief value, and not otherwise provided for, thirty per centum ad valorem.

Sec. 15. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid on the importation of the articles hereinafter mentioned the following duties, that is to say:

First. On unmanufactured hemp, thirty-five dollars per ton.

On Manilla and other hems of India, fifteen dollars per ton.

On jute, Sisal grass, sun hemp, coir, and other vegetable substances, not enumerated, used for cordage, ten dollars per ton.

On jute butts, five dollars per ton.

On codilla, or tow of hemp, ten dollars per ton.

On tarred cables or cordage, two cents and a half per pound.

On untarred Manilla cordage, two cents per pound; on all other untarred cordage, three cents per pound.

On yarns, four cents per pound.

On coir yarn, one cent per pound.

On seines, six cents per pound.

On cotton bagging, or any other manufacture not otherwise provided for, suitable for the uses to which cotton bagging is applied, whether composed in whole or in part of hemp, jute, or flax, or any other material, valued at less than ten cents per square yard, one cent and a half per pound; over ten cents per square yard, two cents per pound.

On sail duck, twenty-five per centum ad valorem.

On Russia and other sheetings, brown and white, twenty-five per centum ad valorem.

And on all other manufactures of hemp, or of which hemp shall be a component part, not otherwise provided for, twenty per centum ad valorem.

On unmanufactured flax, fifteen dollars per ton.

On tow of flax, five dollars per ton.

On grass cloth, twenty-five per centum ad valorem.

On jute goods, fifteen per centum ad valorem; on all other manufactures of jute or Sisal grass, not otherwise provided for, twenty per centum ad valorem.

Sec. 16. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid on the importation of the articles hereinafter mentioned, the following duties, that is to say:

First. On silk, in the gum, not more advanced in manufacture than singles, tram, and thrown or organzine, fifteen per centum ad valorem.

On all silks valued at not over one dollar per square yard, twenty per centum ad valorem.

On all silks valued at over one dollar per square yard, thirty per centum ad valorem.

On all silk velvets, or velvets of which silk is the component material of chief value, valued at three dollars per square yard, or under, twenty-five per centum ad valorem; valued at over three dollars per square yard, thirty per centum ad valorem.

On floss silks, twenty per centum ad valorem.

On silk ribbons, galloons, braids, fringes, laces, tassels, buttons, button cloths, trimmings, and on silk twist, twist composed of mohair and silk, sewing silk in the gum or purified, and all other manufactures of silk, or of which silk shall be the component material of chief value, not otherwise provided for, thirty per centum ad valorem.

Sec. 17. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid on the importation of the articles hereinafter mentioned the following duties, that is to say:

First. On rough plate, cylinder, or broad window glass, not exceeding ten by fifteen inches, one cent per square foot; above that, and not exceeding sixteen by twenty-four inches, one cent and a half per square foot; above that, and not exceeding twenty-four by thirty inches, two cents per square foot; all above that, and not exceeding in weight one pound per square foot, three cents per square foot.

Provided, That all glass imported in sheets or tables, without reference to size or form, shall pay the highest duty herein imposed.

And provided, further, That all rough plate cylinder, or broad glass, weighing over one hundred pounds per one hundred square feet, shall pay an additional duty on the excess at the same rates as herein imposed.

On crown, plate, or polished, and on all other window glass not exceeding ten by fifteen inches, one cent and-a-half per square foot; above that, and not exceeding sixteen by twenty-four inches, two cents and-a-half per

On all articles of glass, cut, engraved, painted, colored, printed, stained, silvered, or gilded, thirty per centum ad valorem.

On porcelain and Bohemian glass, glass crystals for watches, paintings on glass or glasses, pebbles for spectacles, and all manufactures of glass, or of which glass shall be a component material, not otherwise provided for, and all glass bottles or jars filled with sweetmeats, preserves or other articles, thirty per centum ad valorem.

Second. On China and porcelain ware of all descriptions, thirty per centum ad valorem.

On all brown earthen and common stone ware, twenty per centum ad valorem.

On all other earthen, stone, or crockery ware, printed, white, glazed edge, painted, dipped, or cream colored, composed of earthy or mineral substances, twenty-five per centum ad valorem.

Sec. 18. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid on the importation of the articles hereinafter mentioned the following duties, that is to say :

On all books, periodicals, and pamphlets, and all printed matter and illustrated books, and papers, and on watches, and parts of watches, and watch materials, and unfinished parts of watches, fifteen per centum ad valorem.

Sec. 19. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected and paid a duty of ten per centum on the importation of the articles hereinafter mentioned and embraced in this section, that is to say :—

Acids, nitric, yellow and white, oxalic, and all other acids of every description used for medicinal purposes or in the fine arts ; not otherwise provided for ; aloes ; amber ; ammonia, sal ammonia, muriate and carbonate of ammonia : anise seed ; arrow root ; asafoetida ;

Bamboos ; barks of all kinds, not otherwise provided for ; beeswax ; black lead, or plumbago ; borate of lime ; brass, in pigs or bars, or when old and fit only to be remanufactured ; Brazil paste ; bronze liquors ; building stones ;

Cantharides ; castor beans or seeds ; chronometers, box or ship's, and parts thereof ; cocculus indicus ; compositions of glass or paste, not set, intended for use by jewelers ; corn meal ;

Diamonds, glaziers', set or not set ; Dutch and bronze metal, in leaf ;

Engravings or plates, bound or unbound ; ergot ;

Flocks, waste, or shoddy ; fruit, green, ripe or dried, not otherwise provided for ; furs, dressed or undressed, when on the skin ; 'furs, hatters, dressed or undressed, when not on the skin ;

Gamboge ; ginger, ground, preserved, or pickled ; glass plates or disks,

Oatmeal; oils, palm, seal, and cocoanut; olive oil, in casks, other than salad oil; oranges, lemons, and limes; orange and lemon peel;

Paintings and statuary, not otherwise provided for; paving stones; pearl or hulled barley; Peruvian bark; plaster of Paris, when ground; Prussian blue;

Quicksilver;

Rhubarb; rye flour;

Saffron and saffron cake; saltpetre, or nitrate of soda, or potash, when refined or partially refined; salts of tin; sarsaparilla; sepia; shaddock; sheathing paper; sponges; spunk; squills;

Tapioca; taggers' iron; teazels;terne tin, in plates or sheets; tin foil; tin, in plates or sheets;

Vanilla beans; vegetables not otherwise provided for; verdigris;

Yams.

Sec. 20. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid a duty of twenty per centum on the importation of the articles hereinafter mentioned and embraced in this section, that is to say:—

Antimony, tartrate of; acids, citric, and tartaric;

Blank books, bound or unbound; blue or Roman vitriol, or sulphate of copper; boards, planks, staves, laths, scantling, spars, hewn and sawed timber, and timber used in building wharves; brick, fire brick, and roofing and paving tile, not otherwise provided for; brimstone, in rolls; bronze powder; Burgundy pitch; burr stones, manufactured or bound up into mill stones;

Calomel; castor oil; castorum; chicory root; chocolate; chromate of lead; corks; cotton laces, cotton insertings, cotton trimming laces, and cotton braids; cowhage down; cubebs;

Dried pulp;

Ether;

Feather beds, feathers for beds, and downs of all kinds; felspar; fig blue; firewood; fish glue, or isinglass; fish skins; flour of sulphur; Frankfort black; fulminates, or fulminating powders;

Glue; gold and silver leaf; grapes; gunpowder;

Hair, curled, moss, seaweed, and all other vegetable substances used for beds or mattresses; hat bodies, made of wool, or of which wool is the component material of chief value; hatters' plush, composed of silk and cotton, but of which cotton is the component material of chief value;

Lampblack; leather, tanned, bend, or sole; leather, upper, of all kinds, except tanned calf-skin, which shall pay twenty-five per centum ad valorem.

Magnesia, malt, mats, of cocoa nut; matting, China, and other floor matting, and mats made of flags, jute, or grass; mercurial preparations, not otherwise provided for; medicinal roots and leaves and all other drugs and medicines in a crude state, not otherwise provided for; metals, unmanufactured, not otherwise provided for; mineral and bituminous substances in a crude state, not otherwise provided for; musical instruments of all kinds, and strings for musical instruments of whip, gut, or catgut, and all other strings of the same material; mustard, ground or manufactured;

Needles of all kinds for sewing, darning, and knitting;

Oils, neatsfoot and other animal oils, spermaceti, whale, and other fish

oil, the produce of foreign fisheries; oils volatile, essential or expressed, not otherwise provided for; osier or willow, prepared for basket maker's use;

Paints, dry or ground in oil, not otherwise provided for; pitch; plaster of Paris, calcined;

Quills;

Ratans and reeds, manufactured or partially manufactured; red precipitate; Roman cement; rosin;

Sal soda, hyposulphate of soda, and all carbonates of soda, by whatever name designated, not otherwise provided for; salts, Epsom, Glauber, Rochelle, and all other salts and preparations of salts, not otherwise provided for; shoes or boots, and other articles, composed wholly of India-rubber, not otherwise provided for; skins, tanned and dressed, of all kinds; spices of all kinds, not otherwise provided for; spirits of turpentine; starch; stereotype plates; still bottoms; strychnine; sulphate of barytes, crude or refined; sulphate of magnesia; sulphate of quinine;

Tar; thread laces and insertings; type metal; types, new;

Varnish of all kinds; Vandyke brown; Venetian red; vermilion;

Whalebone, the produce of foreign fisheries; white vitriol or sulphate of zinc; wood unmanufactured, not otherwise provided for; woollen listings.

Sec. 21. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid on copper ore and diamonds, cameos, mosaics, gems, pearls, rubies, and other precious stones, when not set, a duty of five per centum ad valorem; on the same when set in gold, silver, or other metal, or on imitations thereof, and all other jewelry, twenty-five per centum ad valorem; on hair cloth and hair seatings, and all other manufactures of hair, not otherwise provided for, twenty-five per centum ad valorem.

Sec. 22. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid a duty of thirty per centum on the importation of the articles hereinafter mentioned and embraced in this section, that is to say:

Alabaster and spar ornaments;

Anchovies, sardines, and all other fish preserved in oil;

Argentine, alabatta, or German silver, manufactured or unmanufactured;

Articles embroidered with gold, silver, or other metal;

Articles worn by men, women or children, of whatever material composed, made up, or made wholly or in part by hand, not otherwise provided for;

Asses' skins;

Balsams, cosmetics, essences, extracts, pastes, perfumes, and tinctures, used either for the toilet or for medicinal purposes;

Baskets, and all other articles composed of grass, osier; palm leaf, straw, whalebone, or willow, not otherwise provided for;

Beads of amber, composition, or wax, and all beads;

Benzoates; Bologna sausages;

Bracelets, braids, chains, curls or ringlets, composed of hair, or of which hair is a component material;

Braces, suspenders, webbing, or other fabrics, composed wholly or in part of India rubber, not otherwise provided for;

Brooms and brushes of all kinds;

Buttons and button moulds of all kinds;

Canes and sticks for walking, finished or unfinished;

- Capers, pickles, and sauces of all kinds not otherwise provided for;
- Caps, hats, muffs, and tippets of fur, and all other manufactures of fur, or of which fur shall be a component material;
- Caps, gloves, leggings, mits, socks, stockings, wove shirts and drawers, and all similar articles made on frames, of whatever material composed, worn by men, women, or children, and not otherwise provided for;
- Carbonate of magnesia;
- Card cases, pocket-books; shell boxes, souvenirs, and all similar articles of whatever material composed;
- Carriages and parts of carriages;
- Clocks and parts of clocks;
- Clothing, ready-made, and wearing apparel of every description, of whatever material composed, except wool, made up or manufactured wholly or in part by the tailor, seamstress, or manufacturer;
- Coach and harness furniture of all kinds, saddlery, coach and harness hardware, silver plated, brass, brass plated, or covered, common tinned, burnished or japanned, not otherwise provided for;
- Combs of all kinds;
- Compositions of glass or paste, when set;
- Composition tops for tables, or other articles of furniture;
- Comfits, sweetmeats, or fruits preserved in sugar, brandy, or molasses, not otherwise provided for;
- Coral, cut or manufactured; cotton cords, gimps, and galloons; cotton laces, colored; court plaster; crayons of all kinds; cutlery of all kinds;
- Dolls and toys of all kinds;
- Encaustic tiles;
- Epaulets, galloons, laces, knots, stars, tassels, tresses, and wings of gold, silver, or other metal;
- Fans and fire screens of every description, of whatever material composed;
- Feathers and flowers, artificial or ornamental, and parts thereof, of whatever material composed;
- Flats, braids, plaits, sparterre, and willow squares, used for making hats and bonnets;
- Firecrackers;
- Frames and sticks for umbrellas, parasols, and sun-shades, finished or unfinished;
- Furniture, cabinet and household;
- Hair pencils;
- Hat bodies of cotton;
- Hats and bonnets for men, women, and children, composed of straw, chip, grass, palm leaf, willow, or any other vegetable substance, or of hair, whalebone, or other material, not otherwise provided for;
- Human hair, cleansed or prepared for use;
- Ink and ink powder;
- Japanned, patent, or enameled leather, or skins of all kinds;
- Japanned ware of all kinds, not otherwise provided for;
- Jet, and manufactures of jet, and imitations thereof;
- Lead pencils;
- Maccaroni, vermicelli, gelatine, jellies, and all similar preparations;
- Manufactures of silk, or of which silk shall be a component material, not otherwise provided for;

- Manufactures of the bark of the cork tree, except corks;
- Manufactures of bone, shell, horn, ivory, or vegetable ivory;
- Manufactures, articles, vessels, and wares, not otherwise provided for, of brass, copper, gold, iron, lead, pewter, platina, silver, tin, or other metal, or of which either of these metals or any other metal, shall be the component material of chief value;
- Manufactures, not otherwise provided for, composed of mixed materials, in part of cotton, silk, wool, worsted or flax;
- Manufactures of cotton, linen, silk, wool or worsted, if embroidered or tambured, in the loom or otherwise, by machinery or with the needle, or other process, not otherwise provided for;
- Manufactures of cedar wood, granadilla, ebony, mahogany, rosewood and satinwood;
- Marble in the rough or blocks, manufactures of marble, marble paving tiles and all marble sawed, squared, dressed or polished;
- Manufactures and articles of leather, or of which leather shall be a component part, not otherwise provided for;
- Manufactures of paper, or of which paper is a component material, not otherwise provided for;
- Manufactures, articles, and wares, of papier mache;
- Manufactures of goat's hair or mohair, or of which goat's hair or mohair shall be a component material, not otherwise provided for;
- Manufactures of wood, or of which wood is the chief component part, not otherwise provided for;
- Medicinal preparations, not otherwise provided for;
- Metallic pens; mineral waters;
- Muskets, rifles, and other fire-arms;
- Oilcloth of every description, of whatever material composed, not otherwise provided for;
- Olive salad oil; olives;
- Paper boxes and all other fancy boxes;
- Paper envelopes;
- Paper hangings, and paper for screens or fire-boards; paper, antiquarian, demy, drawing, elephant, foolscap, imperial letter, and all other paper not otherwise provided for;
- Parasols and sunshades; parchment;
- Plated and gilt ware of all kinds; playing cards;
- Prepared vegetables, meats, fish, poultry, and game, sealed or unsealed, in cans or otherwise;
- Red chalk pencils;
- Salmon, preserved;
- Scagliola tops, for tables or other articles of furniture;
- Sealing wax; side arms of every description;
- Silver plated metal, in sheets or other form;
- Slates, roofing slates, slate pencils, slate chimney pieces, mantles, slabs for tables, and all other manufactures of slate;
- Soap, castile, perfumed, Windsor, and all other kinds;
- Twines and pack-thread, of whatever material composed, not otherwise provided for;
- Umbrellas; unwrought clay, three dollars per ton;
- Vellum; velvet, when printed or painted; waters, water colors;
- Webbing composed of wool, cotton, flax, or any other materials.

Sec. 23. *And be it further enacted*, That from and after the day and year aforesaid the importation of the articles hereinafter mentioned and embraced in this section shall be exempt from duty, that is to say :

Acids, acetic, acetous, benzoic, boracic, muriatic, sulphuric, and pyroligneous, and all acids of every description used for chemical and manufacturing purposes, not otherwise provided for; alcornoque;

All books, maps, charts, mathematical nautical instruments, philosophical apparatus, and all other articles whatever imported for the use of the United States; all philosophical apparatus, instruments, books, maps, and charts, statues, statuary, busts and casts of marble, bronze, alabaster or plaster of Paris; paintings and drawings, etchings, specimens of sculpture, cabinets of coins, medals, regalia, gems, and all collections of antiquities: *Provided*, The same be specially imported, in good faith, for the use of any society incorporated or established for philosophical, literary or religious purposes, or for the encouragement of the fine arts, or for the use or by the order of any college, academy, school, or seminary of learning in the United States;

Ambergris; annatto, roncou or Orleans; animal carbon, (bone black);

Animals, living, of all kinds; antimony, crude or regulus of;

Argol, or crude tartar; arsenic; articles in a crude state used in dyeing or tanning, not otherwise provided for; asphaltum; bananas;

Bark, Peruvian, or bark quilla; barilla, and soda ash;

Bells, old, and bell metal;

Berries, nuts, flowers, plants, and vegetables used exclusively in dyeing or in composing dyes; but no article shall be classed as such that has undergone any manufacture;

Birds, singing or other, and land and water fowls;

Bismuth; bitter apples; bolting cloths; bones, burnt, and bone-dust;

Books, maps, and charts imported by authority of the Joint Library Committee of Congress for the use of the library of Congress; *Provided*, That if, in any case, a contract shall have been made with any bookseller, importer, or other person aforesaid, shall have paid the duty or included the duty in said contract, in such case the duty shall be remitted;

Borax, crude, or tincal; boucho leaves;

Brazil wood, braziletto, and all other dyewoods, in sticks;

Breccia, in blocks or slabs;

Brimstone, crude, in bulk; brime;

Bullion, gold and silver;

Burrstones, wrought or unwrought, but unmanufactured, and not bound up into millstones;

Cabinets of coins, medals, and all other collections of antiquities;

Cadmium; calamine; camphor, crude;

Chalk, French chalk, and red chalk; cochineal; cobalt;

Cocoa, cocoa shells, cocoa leaves, and cocoa nuts;

Coffee and tea, when imported direct from the place of their growth or production, in American vessels, or in foreign vessels entitled by reciprocal treaties to be exempt from discriminating duties, tonnage, and other charges;

Coffee, the growth or production of the possessions of the Netherlands, imported from the Netherlands in the same manner;

Coins, gold, silver and copper;

Copper, when imported for the United States mint;

- Cotton ; cork-tree bark, unmanufactured ;
- Cream of tartar ; cudbear, vegetable, and orchil ;
- Divi-divi ; dragon's blood ;
- Emery, in lump or pulverized ; extract of indigo ; extract of madder ;
- Extracts and decoctions of logwood and other dyewoods, not otherwise provided for ;
- Felt, adhesive, for sheathing vessels ;
- Flints ; flint, ground ;
- Fish, fresh caught, for daily consumption ;
- Fullers' earth ;
- Ginger root ; gum, Arabic, Barbary, East India, Jedda, Senegal, Tragacanth, Benjamin or Benzoin, myrrh, and all other gums and resins in a crude state, not otherwise provided for ;
- Gutta percha, unmanufactured ;
- Gridstones, rough or unfinished ;
- Garden seeds, and all other seeds for agricultural, horticultural, medicinal, and manufacturing purposes, not otherwise provided for ;
- Glass, when old, not in pieces which can be cut for use, and fit only to be remanufactured ;
- Goods, wares, and merchandise, the growth, produce, or manufacture of the United States, exported to a foreign country, and brought back to the United States in the same condition as when exported, upon which no drawback or bounty has been allowed : *Provided*, That all regulations to ascertain the identity thereof, prescribed by existing laws, or which may be prescribed by the Secretary of the Treasury, shall be complied with ;
- Guano ;
- Household effects, old, and in use of persons or families from foreign countries, if used abroad by them and not intended for any other person or persons, or for sale ;
- Hair of all kinds, uncleaned and unmanufactured, and all long horse-hair, used for weaving, cleaned or uncleaned, drawn or undrawn ;
- India rubber, in bottles, slabs, or sheets, unmanufactured ; India rubber, milk of ;
- Indigo ; ice ; iridium ; iris, orris root ;
- Ivory, unmanufactured, ivory nuts, or vegetable ivory ;
- Junk, old, and oakum ;
- Kelp ;
- Lac dye ; lac spirits ; lac sulphur ;
- Lastings, mohair cloth, silk, twist, or other manufactures of cloth, cut in strips or patterns of the size and shape for shoes, slippers, boots, booties, gaiters, and buttons, exclusively, not combined with India rubber ;
- Leeches ; liquorice root ;
- Madder, ground or prepared, and madder root ;
- Manuscripts ; marine coral, unmanufactured ;
- Medals, of gold, silver, or copper ;
- Machinery, suitable for the manufacture of flax and linen goods only, and imported for that purpose solely, but not including that which may be used for any other manufactures ;
- Maps and charts ; mineral blue ;
- Models of inventions, and other improvements in the arts : *Provided*, That no article or articles shall be deemed a model or improvement which can be fitted for use ;

Munjeet, or India madder;
 Natron; nickel; nutgalls; nux vomica;
 Oil, spermaceti, whale and other fish, of American fisheries, and all other articles the produce of such fisheries;
 Orpiment, or sulphuret of arsenic;
 Paintings and statuary, the production of American artists residing abroad: *Provided*, The same be imported in good faith, as objects of taste and not of merchandise;
 Palm leaf, unmanufactured; pearl, mother of;
 Personal and household effects, not merchandise, of citizens of the United States dying abroad;
 • Pineapples; plantains;
 Plaster of Paris, or sulphate of lime unground;
 Platina, unmanufactured; platina vases or retorts;
 Polishing stones; pumice and pumice-stones;
 Quassia-wood;
 Rags, of whatever material except wool;
 Ratans and reeds, unmanufactured;
 Rottenstone;
 Safflower; saltpetre, or nitrate of soda, or potash, when crude;
 Sandal wood; seedlac;
 Sheathing metal, or yellow metal, not wholly of copper, nor wholly or in part of iron, ungalvanized, in sheets forty-eight inches long and fourteen inches wide, and weighing from fourteen to thirty-four ounces per square yard;
 Shellac; shingle-bolts and stave bolts;
 Silk, raw, or as reeled from the cocoon, not being doubled, twisted, or advanced in manufacture any way, and silk cocoons and silk waste;
 Snails; specimens of natural history, mineralogy, and botany;
 Staves for pipes, hogsheads, or other casks;
 Stoneware, not ornamented, above the capacity of ten gallons;
 Substances expressly used for manure; sumac;
 Terra japonica, catechu, or cutch;
 Tin, in pigs, bars or blocks;
 Tortoise and other shells, unmanufactured;
 Trees, shrubs, bulbs, plants and roots not otherwise provided for;
 Turmeric; types, old, and fit only to be remanufactured;
 Wearing apparel in actual use, and other personal effects, (not merchandise,) professional books, implements, instruments and tools of trade, occupation or employment of persons arriving in the United States; *Provided*, That this exemption shall not be construed to include machinery, or other articles imported for use in any manufacturing establishment, or for sale;
 Weld; woad or pastel;
 Woods, namely: cedar, lignum vitæ, lancewood, ebony, box, gfanadilla, mahogany, rosewood, satin wood and all cabinet woods, unmanufactured;
Wool, unmanufactured, and all hair of the goat, alpaca, and other like animals, unmanufactured, the value whereof at the last port or place from whence exported, to the United States shall be eighteen cents, or under, per pound.

Sec. 24. *And be it further enacted*, That from and after the day and year aforesaid there shall be levied, collected, and paid on the importa-

tion of all raw or unmanufactured articles, not herein enumerated or provided for, a duty of ten per centum ad valorem; and on all articles manufactured in whole or in part, not herein enumerated or provided for, a duty of twenty per centum ad valorem.

Sec. 25. *And be it further enacted, That all goods, wares, and merchandise which may be in the public stores, on the day and year aforesaid, shall be subject to no other duty upon the entry thereof than if the same were imported respectively after that day.*

Sec. 26. *And be it further enacted, That whenever the word "ton" is used in this act, in reference to weight, it shall be deemed and taken to be twenty hundred weight, each hundred weight being one hundred and twelve pounds avoirdupois.*

Sec. 27. *And be it further enacted, That railroad iron, partially or wholly worn, may be imported into the United States without payment of duty, under bond to be withdrawn and exported after the said railroad iron shall have been repaired or remanufactured; and the Secretary of the Treasury is hereby authorized and directed to prescribe such rules and regulations as may be necessary to protect the revenue against fraud, and secure the identity, character, and weight of all such importations when again withdrawn and exported, restricting and limiting the export and withdrawal to the same port of entry where imported, and also limiting all bonds to a period of time of not more than six months from the date of the importation.*

Sec. 28. *And be it further enacted, That in all cases where the duty upon any imports of goods, wares, or merchandise shall be subject to be levied upon the true market value of such imports in the principal markets of the country from whence the importation shall have been made, or at the port of exportation, the duty shall be estimated and collected upon the value on the day of actual shipment whenever a bill of lading shall be presented showing the day of shipment, and which shall be certified by a certificate of the United States consul, commercial agent, or other legally authorized deputy.*

Sec. 29. *And be it further enacted, That the annual statistical accounts of the commerce of the United States with foreign countries, required by existing laws, shall hereafter be made up and completed by the Register of the Treasury, under the direction of the Secretary of the Treasury, so as to comprehend and include, in tabular form, the quantity by weight or measure, as well as the amount of value, of the several articles of foreign commerce, whether dutiable or otherwise; and also a similar and separate statement of the commerce of the United States with the British Provinces, under the late, so-called, reciprocity treaty with Great Britain.*

Sec. 30. *And be it further enacted, That from and after the day and year aforesaid there shall be allowed a drawback on foreign hemp manufactured into cordage in the United States, and exported therefrom, equal in amount to the duty paid on the foreign hemp from which it shall be manufactured, to be ascertained under such regulations as shall be prescribed by the Secretary of the Treasury, and no more: Provided, That ten per centum on the amount of all drawbacks so allowed shall be retained for the use of the United States, by the collectors paying such drawbacks respectively.*

Sec. 31. *And be it further enacted, That all acts and parts of acts*

repugnant to the provisions of this act be and the same are hereby repealed: *Provided*, That the existing laws shall extend to and be in force for the collection of the duties imposed by this act for the prosecution and punishment of all offences, and for the recovery, collection, distribution, and remission of all fines, penalties, and forfeitures, as fully and effectually as if every regulation, penalty, forfeiture, provision, clause, matter, and thing to that effect, in the existing laws contained, had been inserted in and re-enacted by this act.

Sec. 32. *And be it further enacted*, That when merchandise of the same material or description, but of different values, are invoiced at an average price, and not otherwise provided for, the duty shall be assessed upon the whole invoice, at the rate the highest valued goods in such invoice are subject to under this act. The words value and valued, used in this act, shall be construed and understood as meaning the true market value of the goods, wares, and merchandise in the principal markets of the country from whence exported at the date of exportation.

Sec. 33. *And be it further enacted*, That all goods, wares, and merchandise actually on shipboard, and bound to the United States, within fifteen days after the passage of this act, and all goods, wares, and merchandise in deposit in warehouse or public store on the first day of April, eighteen hundred and sixty-one, shall be subject to pay such duties as provided by law before and at the time of the passage of this act; and all goods in warehouse at the time this act takes effect, on which the duties are lessened by its provisions, may be withdrawn on payment of the duties herein provided. Approved, March 2, 1861.

DEPARTMENT OF STATE, }

WASHINGTON, March 7, 1861. }

I do hereby certify that the foregoing is a true and accurate copy of the
 { L. S. } original on file in this Department.

W. HUNTER, Chief Clerk.

PUBLIC RESOLUTION 9.

A resolution to correct certain errors in the act entitled "An act to provide for the payment of outstanding Treasury notes, to authorize a loan, to regulate and fix the duties on imports, and for other purposes," approved the second of March, eighteen hundred and sixty-one.

Resolved, by the Senate and the House of Representatives of the United States of America, in Congress assembled, That the act entitled "An act to provide for the payment of outstanding Treasury notes, to authorize a loan, to regulate and fix the duties on imports, and for other purposes," approved the second of March, eighteen hundred and sixty-one, shall be so far altered and corrected as to strike from said act the following words, that is to say, from the list of articles exempt from duty, "wool, unmanufactured, and all hair of the goat, alpaca, and other like animals, unmanufactured, the value whereof at the last port or place from whence exported to the United States shall be eighteen cents, or under, per pound," from section twenty-four* as follows:

Sec. 25. *And be it further enacted*, That all goods, wares and merchandise which may be in the public stores on the day and year aforesaid, shall be subject to no other duty upon entry thereof than if the same were imported respectively after that day. And from section thirteen, as follows:—"On woollen shawls, or shawls of which wool shall be the chief component material, a duty of sixteen cents per pound, and in addition thereto twenty per centum ad valorem." Approved 2d March, 1861.

DEPARTMENT OF STATE, WASHINGTON, March, 9, 1861.

I do hereby certify that the foregoing is a true and accurate copy of the original on file in this Department.

W. HUNTER, Chief Clerk.

* This is an error: the section quoted is section twenty-five of the engrossed Bill.

ALPHABETICAL ARRANGEMENT

OF THE

TARIFFS OF THE UNITED STATES,

FOR THE YEARS 1842, 1846, 1857 AND 1861.

Compiled by the Editors of the Merchants' Magazine, New York.

A.				
	1842.	1846.	1857.	1861.
		per ct.	per ct.	
Absynth.....	gal. 60 cts.	100....	30	gal. 50 cts.
“ oil of, or wormwood....		30....	24	per cent. 20
Accordions.....	per cent. 30....	20....	15	“ 20
Acetate of lead, or white lead...	lb. 4 cts....	20....	15	100 lbs. \$1.50
“ of potasse.....	per cent. 20....	20....	15	per cent. 10
“ of quicksilver.....	“ 20....	20....	15	“ 20
Acetic acid.....	“ 20....	20....	4	“ 10
Acid, benzoic.....	“ 20....	20....	4	“ 10
“ boracic.....	“ 5....	20....	4	“ 10
“ citric, white or yellow.....	“ 20....	20....	4	“ 10
“ muriatic.....	“ 20....	20....	4	free.
“ nitric, or nitric fort.....	“ 20....	20....	15	per cent. 10
“ oxalic.....	“ 20....	20....	4	“ 10
“ pyroligneous.....	“ 20....	20....	4	“ 10
“ tartaric, in crystals or powder	“ 20....	20....	4	“ 10
“ sulphuric, or oil of vitriol..	lb. 1 ct....	10....	4	free.
Acids, all kinds of, used for chemical and manufacturing purposes.....	per cent. 20....	20....	15	free.
Acids, medicinal purposes, or in the fine arts, not otherwise provided for.....	“ 20....	20....	4	per cent. 10
Acorns.....	“ 20....	20....	15	“ 10
Adhesive felt, for ship's bottoms.	free, .. free, .. free,			“ 10
“ plaster, salve.....	per cent. 30....	30....	24	“ 20
Adzes.....	“ 30....	30....	24	“ 30
Agates.....	“ 7....	10....	4	“ 5
Agates, bookbinders'.....	“ 20....	20....	15	“ 20
Alabaster or spar ornaments....	“ 30....	40....	30	“ 30
Alba, canella.....	“ 20....	20....	15	“ 20
Albata, in sheets or otherwise...	“ 30....	30....	24	“ 30

	1842.	1846. per ct.	1857. per ct.	1861.
Alconorque.....	free,....	5....	4	free.
Ale, in bottles.....	gal. 20 cts....	30....	24	per gal. 25 cts.
“ otherwise than in bottles...	“ 15 cts....	30....	24	“ 15 cts.
Alkanet root.....	per cent. 20....	20....	15	per cent. 20
Alkermes.....	“ 20....	20....	15	“ 20
All books, maps, charts, mathe- matical, nautical instruments, philosophical apparatus; stat- ues, statuary, busts and casts of marble, bronze, alabaster or plaster of Paris; paintings and drawings, etchings, specimens of sculpture, cabinets of coins, medals, regalia, gems, and all collections of antiquities; spec- ially imported, in good faith, for the use of any society for phi- losophical, literary, or religious purposes, or the fine arts, or for any college, academy, school, or seminary of learning in the United States.....	free, ..free, .. free,			free
Almonds.....	lb. 3 cts....	40....	30	lb. 3 cts.
“ shelled.....	“ 3 cts....	40....	30	“ 4 cts.
“ pasto and oil of.....	“ 9 cts....	30....	24	per cent. 30
Aloes.....	free,....	20....	4	“ 10
Alspice, oil of.....	per cent. 30....	30....	24	per cent. 30
Alum.....	lb. 1½ cts....	20....	15	lb. ½ ct.
Amber.....	per cent. 20....	20....	4	per cent. 10
“ beads.....	“ 25....	30....	24	“ 30
“ oil of.....	“ 20....	30....	24	“ 30
Ambergris.....	“ 20....	20....	4	free.
Amethyst.....	“ 7....	10....	4	per cent. 5
Ammonia.....	“ 20....	10....	8	“ 10
“ sal.....	“ 20....	10....	8	“ 10
“ salts.....	“ 20....	10....	8	“ 10
“ carb.....	“ 20....	10....	8	“ 10
Ammoniac, crude.....	“ 20....	10....	8	“ 20
“ refined.....	“ 20....	20....	15	“ 30
“ bole.....	“ 20....	20....	15	“ 30
Ammunition, except gunpowder and musket balls.....	“ 30....	30....	24	“ 30
Ammunition, gunpowder.....	lb. 8 cts....	20....	15	“ 20
“ musket balls.....	“ 4 cts....	20....	15	lb. 1½ c.
Anchovies, in oil.....	per cent. 20....	40....	30	per cent. 30
“ in salt.....	“ 20....	20....	15	lb. ½ ct.
Angelica root.....	“ 20....	20....	15	per cent. 20
Angora gloves and mitts.....	“ 25....	30....	24	“ 30
Animals for breed.....	free, ..free, .. free,			free.

	1842.	1843. per ct.	1857. per ct.	1861.
Animal oil, not otherwise enumerated.....	per cent. 20....	20....	15	per cent. 20 free.
Animal carbon.....		free,....	20 .. free,	
Anise seed.....	per cent. 20....	20....	4	per cent. 10 free.
Annatto.....	"	20....	10.... 4	
" extract.....	"	20....	20.... 15	per cent. 20 free.
Antimony, crude.....		free,....	20.... 8	
Antiquo oil.....	per cent. 20....	30....	24	per cent. 30 free.
Antiquities.....		free,....	20 .. free,	
Any goods, wares, or merchandise of the growth, produce, or manufacture of the United States, or of its fisheries, upon which no drawback, bounty, or allowance have been paid.....		free, .. free,	.. free,	free.
Apparel, wearing and other personal baggage in actual use...		free, .. free,	.. free,	free.
Aqua ammonia, or hartshorn....	per cent.	30....	24	per cent. 30
Aqua fortis.....	"	20....	20.... 15	" 20
" mellis, or honey water....	"	20....	30.... 24	gal 10 cts.
Archelia, archil, or orchelia....	"	20....	20.... 15	" 20
" if a vegetable dye....	"	20....	5 .. free,	free.
Argentine.....	"	30....	30.... 24	" 30
Argol.....		free,....	5 .. free,	free.
Armenian, bole.....	per cent. 20....	20....	15	per cent. 20
" stone.....	"	20....	20.... 15	" 20
Arms, fire.....	"	30. .	30.... 24	" 30
" side.....	"	30....	30.... 24	" 30
Arrack.....	gal. 60 cts. .	100....	30	per gal. 50 cts.
Arrow root.....	per cent. 20....	20....	15	per cent. 10 free.
Arsenic, all.....	"	20....	15.... 4	
Articles of the growth, produce or manufacture of the U. States. or its territories, brought back in the same condition as when exported, and on which no drawback was allowed.....		free, .. free,	.. free,	free.
Articles, all, composed wholly or chiefly in quantity of gold, silver, pearl, and precious stones, not otherwise specified.....	per cent. 20....	30....	24	per cent. 30
Articles not in a crude state, used in dyeing or tanning, not otherwise provided for.....	"	20....	20.... 4	" 20
Articles, all, not free, and not subject to any other rate of duty, raw.....	"	20....	20.... 15	" 10
Do. do. manufactured..	"	20....	20.... 15	" 20
Articles manufactured from copper, or of which copper is the				

	1842.	1846. per ct.	1857. per ct.	1861.
material of chief value, not otherwise specified.....	per cent. 30....	30....	24	per cent. 30
Articles worn by men, women or children, of whatever materials composed, made up in whole or in part by hand, not otherwise provided for.....	"	30....	30....	24 " 30
Artificial feathers.....	"	25....	30....	24 " 30
Asphaltum.....	"	20....	20....	4 free,
Assafetida.....	free,....	20....	4	per cent. 10
Asses' skin, or parchment.....	per cent. 25....	30....	24	" 30
" imitation of, or parchment.	"	25....	30....	24 " 30
Augurs.....	"	30....	30....	24 " 30
Auripigmentum, or orpiment....	"	10....	10....	8 free.
Ava root.....	free,....	20....	15	per cent. 20
Awl hafts.....	per cent. 30....	30....	24	" 30
Awls.....	"	30....	30....	24 " 30
Axes.....	"	30....	30....	24 " 30
Axlestrees, iron.....	"	30....	30....	24 lb. 2 cts.
Ayr-stones.....	"	....	20....	15 per cent. 20

B.

Bacon.....	lb. 3 cts....	20....	15	lb. 2 cts.
Baggage, personal, in actual use.	free, .. free, .. free,			free.
Bags, bead, made in part by hand.	per cent. 25....	30....	24	per cent. 30
" grass.....	"	25....	30....	24 { 10 c. or less lb. 1½ cts. over 10 cts. lb. 2 cts.
" gunny.....	sq. yd. 5 cts....	20....	15	{ 10 c. or less lb. 1½ cts. over 10 cts. lb. 2 cts.
" woollen.....	per cent. 40....	30....	24	per cent. 30
" worsted.....	"	40....	25....	19 " 30
" flax and hemp... ..	"	25....	20....	15 { 10 c. or less lb. 1½ cts. over 10 cts. lb. 2 cts.
" carpet, woollen.....	"	30....	30....	24 per cent. 30
" silk.....	"	30....	25....	19 " 30
Baizes.....	sq. yd. 14 cts....	25....	19	lb. 12 cts. and p. ct. 25
Balls, billiard.....	per cent. 20....	30....	24	per cent. 30
" wash.....	"	30....	30....	24 " 30
Balm of Gilead.....	"	25....	30....	24 " 30
Balsam, copaiva.....	"	25....	30....	24 " 30
" of Tolu.....	"	25....	30....	24 " 30
" medicinal.....	"	25....	30....	24 " 30
" all kinds of cosmetic....	"	25....	30....	24 " 30
Bamboos, unmanufactured.....	free,....	10 ..	free,	" 10
Berege, wool, colored.....	per cent. 30....	30....	24	" 30
" wool, gray.....	"	....	30....	24 " 25
" worsted, or silk and cotton	"	30....	25....	19 " 30

	1842.	1846. per ct.	1857. per ct.	1861.
Barilla	free,....	10....	4	free.
Bark of cork trees, unmanufactured	free,....	15....	4	per cent. 10
“ Peruvian	free,....	15 ..	free,	per cent. 10, or free.
“ all not specially mentioned..	free,....	20....	8	per cent. 10
Barley	bush. 20	cts....	20....	15 bush. 15 cts.
“ pearl or hulled	lb. 2	cts....	20....	15 per cent. 10
Barytes, sulphate of.....	“ ½	ct....	20....	15 “ 20
Bar wood (a dye wood).....	free,....	5 ..	free,	free.
Baskets, wood.....	per cent. 30	....	30....	24 per cent. 30
“ osier.....	“ 25	....	30....	24 “ 30
“ palm leaf.....	“ 25	....	30....	24 “ 30
“ straw.....	“ 25	....	30....	24 “ 30
“ grass or whalebone....	“ 25	....	30....	24 “ 30
Bass (inner bark).....	“ 20	....	20....	15 “ 10
Bestard files.....	“ 30	....	30....	24 “ 30
Best ropes.....	lb. 4½	....	25....	19 lb. 2½ cts.
Battledores	per cent. 25	....	30....	24 per cent. 30
Bay water, or Bay rum.....	“ 25	....	30....	24 gal. 25 cts.
“ wax, or myrtle wax.....	“ 15	....	20....	15 per cent. 10
Bdellium, if crude.....	“ 15	....	20....	8 “ 10
“ refined.....	“ 25	....	20....	15 “ 20
Beam knives.....	“ 30	....	30....	24 “ 30
“ scales.....	“ 30	....	30....	24 “ 30
Beans, tonkay	“ 20	....	20....	15 “ 10
“ vanilla.....	“ 20	....	20....	15 “ 10
“ all other not specially mentioned.....	“ 20	....	20....	15 “ 10
Bed feathers.....	“ 25	....	25....	19 “ 20
“ ticking, linen.....	“ 25	....	20....	15 { 30 c. or less sayd. pc. 25 over 30 c. “ “ 30
“ “ cotton.....	“ 30	....	25....	24 per cent. 30
“ caps.....	“ 30	....	30....	24 “ 30
“ screws.....	“ 30	....	30....	24 “ 30
“ sides, as carpeting.....	“ 30	....	30....	24 “ 30
“ spreads, or covers, of the scraps of printed calicoes, sewed	“ 30	....	25....	24 “ 30
Beef.....	lb. 2	cts....	20....	15 lb. 1 ct.
Beer, in bottles.....	gal. 20	cts....	30....	24 gal. 25 cts.
“ otherwise than in bottles..	gal. 15	cts....	30....	24 gal. 15 cts.
Bees' wax.....	per cent. 15	....	20....	15 per cent. 10
Bell cranks.....	“ 30	....	30....	24 “ 30
“ levers.....	“ 30	....	30....	24 “ 30
“ pulls.....	“ 30	....	30....	24 “ 30
“ metal, manufactured.....	“ 30	....	30....	24 “ 30
Bellows.....	“ 35	....	30....	24 “ 30
Bellows' pipes.....	“ 30	....	30....	24 “ 30
Bells, of bell metal, fit only to be re-manufactured.....	free,....	5 ..	free,	free.
Bells, gold	per cent. 30	....	30....	24 per cent. 30
“ silver.....	“ 30	....	30....	24 “ 30

	1842.	1846. per ct.	1857. per ct.	1861.
Belts, sword leather.....	per cent. 35	30	24	per cent. 30
“ endless for pipes.....	“ 40	30	24	“ 25
Benzoates.....	“ 30	30	24	“ 30
Berries, used for dyeing, all ex- clusively, in a crude state....	free	5	free	free.
Berries, not otherwise provided for,	per cent. 20	20	15	per cent. 20
Bezoar stones.....	“ 20	20	15	“ 20
Bichromate of potash.....	“ 20	20	15	lb. 3 cts.
Bick irons.....	“ 30	30	24	per cent. 30
Binding, carpet, if worsted.....	“ 30	25	19	“ 30
“ cotton.....	“ 30	25	24	“ 30
“ woollen.....	“ 30	30	24	“ 30
“ worsted.....	“ 30	25	19	“ 30
“ silk.....	“ 30	25	19	“ 30
“ leather.....	“ 30	30	24	“ 30
“ linen.....	“ 30	20	15	“ 30
“ quality.....	“ 39	25	19	“ 30
Bird's eye stuff, linen.....	“ 25	20	15	{ 30 cts. or less p.ct. 25 over 30 cts. p.ct. 30
“ worsted stuff.....	“ 30	25	19	per cent. 31
Birds.....	“ 20	20	free	free.
Bismuth.....	“ 20	20	free	free.
“ oxide of.....	“ 20	20	15	per cent. 20
Bitter apple.....	“ 20	20	free	free.
Bitts, carpenters'.....	“ 30	30	24	per cent. 30
Bitumen.....	“ 15	20	15	“ 20
Blacking.....	“ 20	20	15	“ 30
Black, lamp.....	“ 20	20	15	“ 20
“ lead pots.....	“ 20	30	24	“ 10
“ lead powder.....	“ 20	20	15	“ 10
Blacksmith's hammers.....	“ ..30	24		lb. 2 cts.
“ sledges.....	“ ..30	24		“ 2 cts.
Bladders.....	“ 20	20	15	per cent. 20
Value p. lb. Duty p. lb. & p. ct.				
Blankets, all.....	{ 75 c. p.c. 15 } ov. 75 c. “ 25	20	15	{ 28 cts. .. 6 cts. .. 10 28 to 40 c., 6 cts. .. 25 over 40 c., 12 cts. .. 20
Blankets of mohair or goats' hair,	per cent. 20	20	15	per cent. 25
Bleaching powders.....	lb. 1 ct.	10	4	100 lbs. 15 cts.
Blooms, iron in.....	ton \$17	30	24	ton \$15
Boards, planed.....	per cent. 30	20	15	per cent. 20
“ rough.....	“ 20	20	15	“ 20
Bobbin.....	“ 30	25	24	“ 30
“ wire, covered with cotton	lb. 8 cts.	30	24	lb. 2 cts. and p. ct. 15
Bocking.....	sq. yd. 14 cts.	25	19	sq. yd. 20 cts.
Bodkins, all.....	per cent. 20	30	24	per cent. 30
Boiler plates.....	“ 30	30	24	ton \$20
Bologna sausages.....	“ 25	30	24	per cent. 30
Bolting cloths.....	“ 20	25	free	free.
Bolts, composition.....	“ 30	30	24	per cent. 30

	1842.	1846. per ct.	1857. per ct.	1861.
Bolt rope, as cordage.....	lb. 4½ cts.....	25....	19	lb. 3 cts.
Bone, black.....	per cent. 20....	20	free,	free,
“ alphabets.....	“ 20....	30....	24	per cent. 30
“ chessmen.....	“ 20....	30....	24	“ 30
“ whale, rosettes.....	“ 20....	30....	24	“ 30
“ tip and bones.....	p. ct. 5 & 20....	5....	4	“ 10
“ whale, other manufactures of	per cent. 20....	30....	24	“ 30
“ “ not of the American				
fisheries.....	“ 12½..	20....	15	“ 20
“ manufactures of.....	“ 20....	30....	24	“ 30
Bonnets, Leghorn.....	“ 35....	30....	24	“ 30
“ all.....	“ 35....	30....	24	“ 30
Bonnet wire, covered with silk...	lb. 12 cts.....	25....	19	lb. 2 cts. and p. ct. 15
“ “ “ “ cotton	“ 8 “	“ 30....	24	“ 2 “ “ 15
Book binders' agates, ferruled,...	per cent. 20....	20....	15	per cent. 20
Books, blank.....	lb. 20 cts.....	20....	15	“ 20
“ periodicals and other works				
in the course of printing and re-				
publication in the U. S.....	lb. 20 & 30 c.....	20....	15	“ 15
Books, printed magazines, pamph-				
lets, periodicals and illustrated				
newspapers, bound or unbound,				
not otherwise provided for....	per cent. 8....	10....	8	“ 15
Books of engravings, bound or un-				
bound.....	“ 20....	10....	8	“ 15
Books and instruments, profes-				
sional, of persons arriving in				
the U. States.....	free, ..free, ..free,			free,
Books, specially imported for the				
use of schools, &c.....	free, ..free, ..free,			free,
Boots.....	pair \$1.25....	30....	24	per cent. 30
“ laced, silk or satin for chil-				
dren.....	“ 25 c....	30....	24	“ 30
“ and bootees, of leather....	“ \$1.25....	30....	24	“ 30
“ rubber.....	per cent. 30....	30....	24	“ 20
Bootees, for women or men, silk..	pair 75 c....	30....	24	“ 30
Boot webbs, linen.....	“ 25....	20....	15	“ 30
Borate of lime.....	“ 25....	20....	12	“ 10
Borax, or tincal.....	“ 25....	25....	4	free.
“ refined.....		25....	4	lb. 3 cts.
Botany, specimens in.....	free, ..free, ..free,			free.
Bottles, apothecaries.....	gross \$1.75 c	\$2.25....	30....	24
Bottles, black glass.....		30....	24	per cent. 30
Bottles, perfumery and fancy,...	gross \$2.50....	30....	24	“ 30
Bottles, containing wine or other				
articles.....	gross \$3.00....	40....	30	“ 30
Boucho leaves.....	free, ..20....	4		free,
Bougies.....	per cent. 30....	30....	24	per cent. 30
Box boards, paper.....	lb. 3 cts.....	30....	24	“ 30
Boxes, gold or silver.....	per cent. 30....	30....	24	“ 30

	1842.	1842.	1857.		1861.
	per cent.	per ct.	per ct.		per cent.
Boxes, musical.....	30	20	15		30
“ japanned dressing.....	25	30	24		30
“ cedar, granadilla, ebony, rose, and satin.....	30	40	30		30
“ all other wood.....	30	30	24		30
“ sand, of tin.....	30	30	24		30
“ shell, not otherwise enu- merated.....	25	30	24		30
“ if paper only, not japanned	25	30	24		30
“ snuff, paper.....	25	30	24		30
“ fancy, not otherwise spe- cified.....	25	30	24		30
Brace bits.....	30	30	24		30
Bracelets, gold or set.....	20	30	24		30
“ gilt.....	25	30	24		30
“ hair.....	25	30	24		30
Braces, carpenters', without bits.	30	30	24		30
Braces and bits, carpenters'....	30	30	24		30
Braces or suspenders, all.....	35	30	24		30
Brackets.....	30	30	24		30
Brads.....	lb. 5 cts.	30	24		30
Braids, cotton.....	per cent. 30	25	24		30
“ in ornaments for head dresses.....	30	30	24		30
“ hair, not made up for head dresses.....	30	30	24		30
“ hair, made up for head dresses.....	per cent. 25	30	24		30
“ straw, for making bonnets or hats.....	30	30	24		30
Brandy.....	gal. \$1.00	100	30	1st proof, gal. \$1.00	
Brass, manufactures of, not other- wise enumerated.....	per cent. 30	30	24		30
“ in plates or sheets.....	30	30	24		10
“ in bars.....	free	5	free		10
“ in pigs.....	free	5	free		10
“ old, only fit to be remanu- factured.....	free	5	free		10
“ wire.....	per cent. 25	30	24		30
“ rolled.....	30	30	24		30
“ battery.....	lb. 12½ cts.	30	24		30
“ studs.....	per cent. 30	30	24		30
“ screws.....	lb. 30 cts.	30	24		30
Braziers', rods, of 3-16 to 10-16 of an inch diameter.....	lb. 2½ cts.	30	24		25
Brazil paste, or pasta de Brazil..	per cent. 7½	15	13		10
“ pebble.....	gross \$2.00	10	8		10
“ pebbles prepared for spec- tacles.....	\$2.00	30	24		30
Brocia.....	per cent. 20	20	15		free

	1842.	1846.	1857.	1861.
	per ct.	per ct.	per ct.	
Bricks.....	per cent. 25....	20....	15	per cent. 20
Bridles.....	" 35....	30....	24	" 30
Brimstone, crude.....	" 20....	15....	4	free.
" rolled.....	" 25....	20....	15	per cent. 20
Bristles.....	lb. 1 c.	5....	4	lb. 4 cts.
Bristol stones.....	per cent. 20....	20....	15	per cent. 10
" boards.....	lb. 12½ cts.	30....	24	" 30
" " perforated.....	lb. 12½ cts.	30....	24	" 30
Britannia ware.....	per cent. 30....	30....	24	" 30
Brodequina, woolen.....	" 50....	30....	24	" 30
" leather.....	" 40....	30....	24	" 30
Bronze casts.....	" 30....	30....	24	" 30
" all manufactures of.....	" 30....	30....	24	" 30
" metal in leaf.....	" 30....	20....	15	" 30
" powder.....	" 20....	20....	15	" 15
" pale, yellow, white and red.....	" 30....	20....	15	" 30
" liquid, gold or bronze color	" 20....	20....	15	" 10
Brooms, all kinds.....	" 30....	30....	24	" 30
Brown, rolls, linen.....	" 25....	20....	15	{ 30 c. or less, p. ct. 25 over 30 cts., " 30
" smalts.....	" 20....	20....	15	free.
Brucine.....	" 20....	20....	15	" 20
Brushes of all kinds.....	" 30....	30....	24	" 30
Buckram.....	" 25....	20....	15	" 25
Bugles, glass, if cut.....	" 25....	40....	30	" 30
" glass, if not cut.....	" 25....	30....	24	" 25
Building stones.....	" 10....	10....	8	" 10
Bulbs, or bulbous roots.....	free, .. free, .. free,			free.
Bullets.....	lb. 4 cts.	20....	15	lb. 1½ cts.
Bullrushes.....	per cent. 20....	20....	15	per cent. 10
Bullion.....	free, .. free, .. free,			free.
Bunting.....	per cent. 30....	25....	19	per cent. 30
Burgundy pitch.....	" 20....	25....	19	" 20
Burlaps.....	" 25....	20....	15	{ 30 c. or less, p. ct. 25 over 30 cts. p. ct. 30
Bur stones, unbound.....	free, .. 10 .. free,			free.
" bound up.....	per cent. 20....	10 .. free,		per cent. 20
Busts, lead.....	lb. 4 cts.	30....	24	lb. 1½ cts.
Butchers' knives.....	per cent. 30....	30....	24	per cent. 30
Butter.....	" 5 cts.	20....	15	lb. 4 cts.
Butt hinges, cast iron.....	lb. 2½ cts.	30....	24	" 2 cts.
Button moulds, of whatever material.....	per cent. 25....	25....	19	per cent. 30
Buttons, metal, all kinds of.....	" 30....	25....	19	" 30
" all other.....	" 25....	25....	19	" 80
" with links.....	" 25....	25....	19	" 30

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	1842.	1846. per ct.	1857. per ct.	1861.
Cabinet wares.....	per cent. 30....	30....	24	per cent. 30
Cables, tarred	lb. 5 cts....	25....	19	lb. 2½ cts.
" mannilla, untarred.....	lb. 4½ cts....	25....	19	" 2 cts.
" iron or chain, or parts of.	" 2½ cts....	30....	24	" 1½ cts.
Caddie balls.....	per cent. 30....	30....	24	per cent. 30
Cadmium	" 20....	20....	15	" 20
Cajeput, oil of.....	" 20....	30....	24	" 20
Calamine.....	" 20....	20....	15	" 20
Calcined magnesia.....	" 20....	30....	24	" 20
Caliminaris lapis.....	" 20....	20....	15	" 20
Calomel, and all other mercurial preparations	" 25....	25....	19	" 20
Calx.....	" 20....	20....	15	" 20
Camblets, of mohair or goats....	" 20....	25....	19	" 20
Camels' hair.....	" 10....	10....	8	" 10
" pencils, in quill	" 20....	30....	24	" 20
" " other.....	" 20....	30....	24	" 20
Cameos.....	" 7....	10....	4	" 5
" set.....	" 7....	30....	24	" 25
Camomile flowers.....	" 20....	20....	15	" 20
Camphor, refined.....	" 20....	40	30	" 20
" crude.....	lb. 5 cts....	25....	8	free.
Canary seed.....	per cent. 20 ..	free, ..	free,	per cent. 10
Cancrorum oculi, or crab's eye...	" 20....	20	15	" 20
Candles, Tallow.....	lb. 4 cts....	20....	15	lb. 2 cts.
" wax or sperm.....	" 8 cts....	20....	15	" 8 cts.
" other.....	" 4 cts....	20....	15	" 4 cts.
Candlesticks, alabaster.....	various,...	40....	30	per cent. 30
" glass cut.....	lb. 45 cts....	40....	30	" 30
" spa.....	various,...	40....	30	" 30
" all other.....	"	30....	24	" 30
Candy, sugar.....	lb. 6 cts....	30....	24	lb. 4 cts.
Canella, alba	per cent. 20....	20....	15	per cent. 20
Canes, walking, finished or not..	" 30....	30....	24	" 30
Cannetilla, a wire ribbon.....	lb. 12 cts....	30....	24	lb. 2 cts. and p. ct. 15
Cannon, brass or iron.....	per cent. 30....	30	24	per cent. 30
Cantharides.....	free,...	20....	8	free.
Canton crapes	lb. 2½ cts....	25....	29	{ over \$100 p. cent. 30 \$100 or less p. ct. 25
Canvas, for floor cloth or wearing apparel, linen.....	{ p. cent. 25....	20....	15	{ 30 cts. or less p. ct. 25 over 30 cts. " 30
Caoutchouc gums.....	free,...	20....	8	free.
Capers.....	per cent. 30....	30....	24	per cent. 30
Cap wire, covered with silk.....	lb. 12 cts....	25....	19	lb. 2 cts. and p. ct. 15
" " cotton thread	" 8 cts....	30....	24	" 2 cts. " " 15
Caps of chip, lace, leather, cotton, silk, linen, &c.....	p. ct. 30 e 50....	30....	24	per cent. 30

	1842.	1846. per ct.	1857. per ct.	1861.
Caps, gloves, leggins, mitts, socks, stockings, wove shirts and drawers, and all similar articles made in frames, and worn by men, women, or children, and not otherwise provided for.....	per cent. 30....	30....	24	per cent. 30
Cap pieces for stills.....	" 30....	30....	24	" 30
Caps, lace, sewed or not.....	p. ct. 20 c 40....	30....	24	" 30
Capsules.....	per cent. 20....	30....	24	" 30
Carbines or carabines.....	" 30....	30....	24	" 30
Carbonate of magnesia.....	" 20....	30....	24	" 30
" sal, or brinal of soda..	" 20....	20....	8	" 20
" of ammonia.....	" 20....	10....	8	" 10
" of iron.....	" 20....	20....	15	" 20
Carboys.....	each 30 cts....	30....	24	" 30
Carbuncles.....	per cent. 10....	10....	4	" 10
Cardamon seed.....	" 20 ..free, .. free,			" 20
Card cases, of whatever material composed.....	" 30....	30....	24	" 30
Cards, playing, visiting, &c.....	pack 25 cts....	30....	24	" 20
Carmine, water color.....	per cent. 20....	30....	24	" 20
" a liquid dye.....	" 20....	15		" 20
Caroline plaids, cotton and wool.	" 30....	30....	24	" 30
Carpets, Aubusson, Wilton, Saxony, Axminster, Tournay or tapestry velvet, Brussels Jaquard, and medallion.....	sq. yd. 65 cts....	30....	24	{ yd. 1.25 or l'as-a-y. 40c. over \$1.25 yd. " 50c.
Carpets, Brussels and Brussels tapestry.....	yd. 55 cts....	30....	24	sq. yd. 30 cts.
Carpets, treble ingrain, Venetian.....	sq. yd. 30 cts....	30....	24	" 25 cts.
" hemp or jute.....	per cent. 30....	20....	15	" 4 cts.
" druggets, bockings and felt.....	" 30....	30....	24	" 20 cts.
" all other.....	" 30....	30....	24	per cent. 30
" matting.....	" 25....	25....	19	" 30
" binding.....	" 30....	25....	19	" 30
Carriages of all descriptions, and parts thereof.....	" 30....	30....	24	per cent. 30
Carriage springs.....	" 30....	30....	24	" 30
Carvers.....	" 30....	30....	24	" 30
Cascarilla.....	" 20....	20....	8	" 10
Casement rods, iron for.....	lb. 2 cts....	30....	24	" 30
Cases, fish skin.....	per cent. 20....	20....	15	" 30
Cashmere, borders of wool,....	" 40....	30....	24	" 30
" of Thibet.....	" 20....	25....	19	" 30
" cloth.....	" 40....	30....	24	" 30
" gown patterns, wool being a component material...	" 40....	30....	24	" 30
Cashmere gowns, made.....	" 40....	30....	24	lb. 12 cts. & per ct. 25
" shawls, Thibet.....	" 40....	30....	24	" 12 " " 25

	1842.	1842. per ct.	1857. per ct.	1861.
Cashmere shawls, wool being a component part.....	per cent. 40....	30....	24	lb. 12 cts. & per ct. 25
Casks, empty.....	"	30....	30....	per cent. 30
Cassada, or meal of.....	"	20....	20....	" 20
Cassia, Chinese, Calcutta and Sumatra.....	lb. 5 cts.	40....	4	lb. 4 cts.
Cassia, buds.....	per cent. 20....	20....	15	lb. 8 cts.
" fistula.....	"	20....	20....	" 8 cts.
Cassimere, woolen.....	"	40....	30....	24 lb. 12 cts. & per ct. 25
" cotton, wool being a component part, chief value...	"	40....	30....	24 " 12 " " 25
Castanas, or castinai.....	lb. 1 ct.	30....	24	lb. 1 ct.
Castings of plaster or iron, even if with wrought iron rings, hoops, handles, &c.....	lb. 1 ct.	30....	24	per cent. 25
Castor beans.....	per cent. 20....	20....	15	" 10
" oil.....	gal. 40 cts.	20....	15	" 20
Castors, brass, iron or wood.....	per cent. 30....	30....	24	" 30
" or cruets, silver.....	"	30....	30....	24 " 30
" " plated.....	"	30....	30....	24 " 30
" " wood.....	"	30....	30....	24 " 30
Castor glasses, not in the frames or cruets, cut.....	gross \$2.50....	40....	30	" 30
Castor glasses, not in the frames or cruets, not cut.....	" \$4.00....	30....	24	" 25
Castorine lize, woolen cloth.....	per cent. 40....	30....	24	lb. 12 cts. and p. ct. 25
Castorum.....	"	20....	20....	15 per cent. 30
Cast shoe bills.....	"	30....	30....	24 " 30
Cast iron vessels, not otherwise specified.....	lb. 1½ cts.	30....	24	" 25
Catches, brass, copper or iron...	per cent. 30....	30....	24	" 30
Catechu.....	"	10....	10 ..	free, " 10
Catgut.....	"	20....	20....	15 " 20
Catsup.....	"	30....	30....	24 " 20
Caulking mallets.....	"	30....	30....	24 " 30
Caustic.....	"	20....	30....	24 " 20
Celtz water.....	"	30....	30....	24 " 20
Cement, Roman.....	"	20....	20....	15 " 30
Cerise, eau de, kirschwasser, or cherry water.....	gal. 60 cts.	100....	30	per gal. 50 cts.
Ceruse, dry or in oil.....	per cent. 20....	20....	15	per cent. 30
Chafing dishes.....	"	30....	30....	24 " 30
Chains, all.....	lb. 4 cts.	30....	24	<div> <div>over ½ in. diam. lb. 1½ c.</div> <div>½ c ½ " " 2 c.</div> <div>No. 9 & ½ " " 2½ c.</div> <div>und. No. 9 " p. ct. 25</div> </div>
Chairs, sitting.....	per cent. 30....	30....	24	per cent. 30
Chalk, red.....	"	20....	20....	4 free.
" red, pencils.....	"	25....	30....	24 per cent. 30
" French.....	"	20....	20....	4 free.

	1842.	1846. per ct.	1857. per ct.	1861.
Chalk, white	free,	5....	4	free.
Chambray gauze, cotton, as cotton, per cent.	30....	25....	24	sq. yd. 4 cts.
" if wool is a component				
part.....	" 40....	30....	24	lb. 12 cts. and p. ct. 25
of silk only.....	lb. \$2.50....	25....	19	per cent. 30
Chandeliers, brass.....	per cent. 30....	30....	24	" 30
" glass, cut.....	lb. 45 cts....	40....	30	" 30
Chapepote.....	per cent. 20....	20....	4	" 10
Charts	free,	10 ..	free,	free.
" books.....	per cent. 20....	10....	8	per cent. 15
Checks, cotton.....	" 40....	25....	24	(See Cotton.)
" princess, wool.....	" 40....	30....	24	lb. 12 cts. and p. ct. 25
" " worsted.....	" 40....	25....	19	" 12 " " 25
" linen.....	" 25....	20....	15	per cent. 30
Cheese.....	lb. 9 cts....	30....	24	lb. 4 cts.
Chemical preparations, not other- wise enumerated.....	per cent. 20....	20....	15	per cent. 20
Chenille, cords or trimming of, cotton.....	" 30....	30....	24	" 30
Cheroots (India segars).....	lb. 40 cts....	40....	30	(See Segars.)
Cherry rum, a cordial.....	gal. 60 cts. .	100....	30	gal. 50 cts.
Chessmen, bone, ivory, rice or wood	per cent. 30....	30....	24	per cent. 30
Chest handles.....	" 30....	30....	24	" 30
Chicory root.....	free, .	free, .	free,	free.
" " ground.....	per cent. 20....	20....	15	" 20
Children's shoes and slippers....	pair 15 cts....	30....	24	" 30
Chili peppers.....	lb. 10 cts....	30....	4	" 10
China ware	per cent. 30....	30....	24	" 30
" root.....	" 20....	20....	15	" 10
Chinchilla skins, undressed.....	" 10....	10....	8	" 5
" " dressed	" 20....	20....	15	" 20
Chip hats or bonnets.....	" 35....	30....	24	" 30
Chisels, all	" 30....	30....	24	" 30
Chloride of lime.....	lb. 1 ct....	10....	4	" 10
Chlorometers, glass.....	per cent. 20....	30....	24	" 30
Chocolate.....	lb. 4 cts....	20....	15	" 20
Choppa romals and bandanna handkerchiefs, silk.....	lb. \$2.50....	25....	19	" 30
Chowdagary, cottons	" 30....	25....	24	(See Cotton.)
Chromate of potash.....	" 20....	20....	15	lb. 3 cts.
" lead	lbs. 4 cts....	20....	15	" 20
Chromic, yellow	per cent. 20....	30....	24	per cent. 20
" acid.....	" 20....	20....	15	" 15
Chronometers and parts.....	" 20....	10....	8	" 10
Chrysolites.....	" 20....	20....	15	" 10
Ciar, or coliar, rope.....	lb. 4½ cts....	25....	19	lb. 3 cts.
Ciutar.....	per cent. 20....	20....	15	per cent. 10
Cigars.....	lb. 40 cts ..	40....	30	(See Segars.)
" paper	" 40 cts....	40....	30	" "

	1842.	1842. per ct.	1857. per ct.	1861.
Cinchona, Peruvian	per cent. 10	15	free,	free.
Cinchonine.....	"	20	20	per cent. 10
Cinnabar.....	"	20	25	" 20
Cinnamon.....	lb. 25 cts.	30	4	" 20
Circassians, worsted.....	per cent. 30	25	19	" 30
Circingle webb, woolen	"	40	30	24
Citrate of lime.....	"	20	20	15
Citron, in its natural state		free,	20	8
" preserved.....	per cent. 25	40	30	" 10
Civet, oil of.....	"	30	30	24
Clasps, all	"	30	30	24
Clay, ground or prepared.....	"	20	20	15
" unwrought.....		free,	5	4
Clayed sugar, white.....	lb. 2½ cts.	30	24	ton \$3
Cloaks, of wool.....	per cent. 50	30	24	lb. 12 cts. and p. ct. 25
Cloak pins.....	"	30	30	24
Clocks.....	"	25	30	24
Cloth, India rubber.....	"	30	30	24
" woolen	"	40	30	24
" oil, 50 cts. or less.....	yd. 35 cts.	30	24	lb. 12 cts. and p. ct. 25
" " over 50 cts.	" 35 cts.	30	24	per cent. 25
" hemp.....	per cent. 20	20	15	" 30
Clothing, ready made.....	per cent. 50	30	24	" 20
" of wool.....	"	50	30	24
Cloves.....	lb. 8 cts.	40	4	lb. 12 cts. and p. ct. 25
Coaches, or parts thereof.....	per cent. 30	30	24	lb. 4 cts.
Coach furniture of all descriptions	"	30	30	24
Coal, bituminous.....	ton \$1.75	30	24	per cent. 30
" other.....	" \$1.75	30	24	" 30
Coal-hods.....	per cent. 30	30	24	ton \$1.00
Coatings, mohair or goats' hair..	"	20	25	19
Cobalt.....	"	20	20	15
Cochineal.....		free,	10	4
Oculus indicus.....	per cent. 20	20	15	free.
Cocks.....	"	30	30	24
Cocoa.....	lb. 1 c.	10	4	per cent. 10
" shells.....	per cent. 20	10	4	" 30
Cocoa-nuts, West Indies.....		free,	20	4
Oodilla, or tow of hemp.....	ton \$30	15	12	free.
" " flax.....	" \$20	15	12	free.
Oodfish, dry.....	cwt. \$1.00	20	15	ton \$10
Coffee, when imported in Ameri-				" \$5
can vessels from the place of its				100 lbs. 50 cts.
growth.....		free, ..free, .. free,		free.
Coffee, the growth or production				
of the possessions of the Nether-				
lands, imported from the Nether-				
lands.....		free, ..free, .. free,		free.
Coffee, all other.....	per cent. 20	20	15	per cent. 20
Coffee-mills.....	"	30	30	24

	1842.	1846. per ct.	1857. per ct.	1861.
Coins, cabinets of	free, .. free, .. free,			free.
Coir	ton \$25....25....	19		ton \$10
Coke	bush. 5 cts....30....	24		per cent. 25
Colcoother, dry, (oxide of iron)...	" 20....20....	15		" 20
Cold cream	" 25....30....	24		" 30
Colocynth	" 20....20 .. free,			" 10
Cologne water	" 20....30....	24		" 20
Colombo root	" 20....20....	15		" 20
Coloquintida	" 20 ..100....	24		" 20
Coloring for brandy	" 30 ..30....	24		" 10
Colors, water	" 25....30....	24		" 30
Cola, sanglier, cravat stiffeners ..	" 30....30....	24		" 30
Colts' foot	" 20....20....	15		" 20
Combs	" 25....30....	24		" 30
Comforters, made of wool	" 40....30....	24	12 cts. and p. cent. 25	
Comfits, preserved in sugar, brandy, or molasses	" 25....40....	30		per cent. 30
Commode handles	" 25....30....	24		" 30
" knobs	" 25....30....	24		" 30
Compasses	" 30....30....	24		" 30
Composition of glass or paste, set,	" 20....30....	24		" 30
" " " not set,	" 10....10....	8		" 10
Concans, India	" 20....25....	19		" 30
Coney wool	" 10....10....	8		(See Wool.)
Confectionary, all, not otherwise provided for	" 25....30....	24		per cent. 30
Contrayema root	" 20....20....	15		" 20
Copperas	lb. 2 cts....20....	15		lb. $\frac{1}{2}$ ct.
Copper bottoms	per cent. 30....20....	15		per cent. 25
Copper, braziers' and sheets, not otherwise provided for	" 30....20....	15		" 25
Copper, for the use of the mint ..	free .. free, .. free,			free.
" in pigs, bars	free,.... 5 .. free,			lb. 2 cts.
" old, fit only to be re-manufactured	free,.... 5 .. free,			lb. $1\frac{1}{2}$ cts.
" manufactures of, not otherwise specified	per cent. 39....30....	24		per cent. 30
" ore	free, .. free, .. free,			" 5
" rods, bolts, spikes, & nails,	lb. 4 cts....20....	15		per cent. 25
Copper, sheathing for ships, when 14 inches wide and 48 inches long, and weighing from 14 to 34 ozs. per square foot	free, .. free, .. free,			lb. 2 cts.
Copper, sulphate of	lb. 4 cts....20....	15		per cent. 20
Coral	per cent. 20....20....	15		" 30
" cut or manufactured	" 20....30....	24		" 30
Cordage, tarred	lb. 5 cts....25....	19		lb. $2\frac{1}{2}$ cts.
" untarred	" $4\frac{1}{2}$ cts....25....	19		" 3 cts.
" manilla	" $4\frac{1}{2}$ cts....25....	19		" 2 cts.
Cordials, all kinds	gal. 60 cts. ..100....	30		gal. 50 cts.

	1842.	1846. per ct.	1857. per ct.	1861.
Coriander seed.....	per cent. 20	free, ..	free,	per cent. 10
Cork, manufactures of.....	"	25....30....	24	" 30
Corks.....	"	30....30....	24	" 20
Cork-tree, bark of, unmanufactur'd,		free,....15....	4	free.
Cornelian stone.....	per cent. 7....	10....	4	per cent. 5
" rings.....	"	7....20....	15	" 25
Corn fans.....	"	30....30....	24	" 20
Corn, Indian, or maize.....	bush. 10 cts.	20....	15	bush. 10 cts.
" meal.....		20....	15	per cent. 10
Corrosive sublimate, (mercurial) ..	per cent. 25....	25....	19	" 20
Corsets.....	"	50....30....	24	" 30
Cosmetics.....	"	25....30....	24	" 30
Cotton.....	lb. 3 cts.	free, ..	free,	free.
Cotton, unbleach'd, 100 thr'ds sq.in.				
or less, and over 5 oz. p.yd.	per cent. 30....	25....	24	sq. yard 1 ct.
100@140 thr'ds, not 5 oz.	"	30....25....	24	" 2 cts.
140@200 thr'ds, "	"	30....25....	24	" 3 cts.
over 200 thr'ds, "	"	30....24....	24	" 4 cts.
" bleached, 100 thr'ds sq. in.				
or less, and over 5 oz....	"	30....25....	24	" 1½ cts.
100@140 thr'ds, not 5 oz.	"	30....25....	24	" 2½ cts.
140@200 thr'ds, "	"	30....25....	24	" 3½ cts.
over 200 thr'ds, "	"	30....25....	24	" 4½ cts.
" colored, 100 thr'ds sq. inch				
or less, and over 5 oz....	"	30....25....	24	sq.yd. 1½ cts. & p.ct. 10
100@140 thr'ds, not 5 oz.	"	30....25....	24	" 2½ " & " 10
140@200 thr'ds, "	"	30....25....	24	" 3½ " & " 10
over 200 thr'ds, "	"	30....25....	24	" 4½ " & " 10
" other plain woven, costing				
over 16 cts. sq. yard....	"	30....25....	24	per cent. 25
Cotton, all manufactures of, not				
otherwise enumerated.....	"	30....25....	19	" 25
Cotton bagging, 10 cts. lb. or less.	sq. yd. 4 cts.	20....	15	lb. 1½ cts.
" " over 10 cts. lb....	" 4 cts.	20....	15	" 2 cts.
" braces, or suspenders....	per cent. 30....	30....	24	per cent. 30
" caps, gloves, leggins, mitts,				
socks, stockings, wove shirts,				
and drawers.....	"	30....20....	15	" 30
Cotton cord, gimps, and galloons.	"	30....30....	24	" 30
" embroidery, or floss.....	"	25....25....	24	" 20
" hosiery, unbleached.....	"	30....20....	15	" 30
" lace, including bobbinet..	"	20....25....	19	" 30
" laces, insertings, trimmings				
and braids.....	"	30....25....	24	" 20
" spool and other thread....	"	30....25....	24	" 30
" thread, twist, and yarn, all				
unbleach'd and uncolor'd	"	25....25....	24	" 30
" thread, twist, and yarn, all				
bleached or colored....	"	25....25....	24	" 30

	1842.	1846. per ct.	1857. per ct.	1861.
Cotton twist, yarn, and thread, all other on spools or otherwise...	per cent. 30	25	24	per cent. 30
Counters.....	"	20	30	24
Counting-house boxes.....	"	30	30	24
Court plaster.....	"	30	30	24
Cowage, or Cowitch.....	"	20	20	15
Cowries, (shells).....	"	20	5	4
Crab-claws.....	"	20	20	15
Cranks, mill, of wrought iron...	lb. 4 cts.	30	24	" 30
Crapes, silk.....	lb. \$2.50	25	19	(See Silk.)
Crash, 30 cts. or less.....	per cent. 25	20	15	per cent. 25
" over 30 cts.....	"	25	20	15
Cravats.....	"	50	30	24
Cravat stiffeners.....	"	50	30	24
Crayons.....	"	25	30	24
Crayon pencils.....	"	25	30	24
Cream of tartar.....	free	20	4	free
Cream, cotton, as cottons.....	per cent. 30	25	24	per cent. 30
" linen.....	"	25	20	15
Crockery.....	"	30	30	24
Oreous powder.....	"	30	20	15
Crowns, Leghorn hat.....	"	35	30	24
Crucibles, all.....	"	30	30	24
Crystals, glass.....	gross \$2.00	30	24	" 30
Cubebs.....	"	20	20	15
Cudbear.....	"	10	10	4
Cummin seed.....	"	20	free	free
Cupboard turns.....	"	30	30	24
Curls, hair.....	"	25	30	24
Curriers' knives.....	"	30	30	24
Currants.....	lb. 3 cts.	40	8	lb. 2 cts.
Curtain rings.....	per cent. 30	30	24	per cent. 30
Custas, as manufactures of cottons	"	30	25	24
Cutch.....	"	10	10	free
Outlasses.....	"	30	30	24
Outlery, all kinds.....	"	30	30	24
Cyanine of iodine.....	"	20	30	24
" potassium.....	"	20	30	24
" zinc.....	"	20	30	24

D.

Daggers and dirks.....	per cent. 30	30	24	per cent. 30
Dates.....	lb. 1 c.	40	8	lb. $\frac{1}{2}$ c.
Decanters, cut.....		40	30	per cent. 30
" plain.....		30	24	" 30
Delaines, gray.....	per cent. 40	30	24	" 25
" colored.....	"	40	30	24
Delph.....	"	30	30	24

	1842.	1846. per ct.	1857. per ct.	1861.
Delphine	per cent. 20....	20....	15	per cent. 20
Demijohns.....	each 30 cts....	30....	24	" 30
Denmark satin, or satteens, entire- ly stuff	per cent. 20....	25....	19	" 30
Dentifrice.....	" 20....	30....	24	" 20
Devonshire kerseys.....	" 40....	30....	24	lb. 12 cts. and p. c. 25
Diamonds	" 7½....	10....	4	per cent. 5
" set.....	" 7½....	30....	24	" 25
" glaziers'.....	" 25....	15....	12	" 10
Diaper, linen.....	" 25....	20....	15	30 cts. or less p. c. 25
"	" 25....	20....	15	over 30 cts. p. c. 30
Diapers, cotton.....	" 30....	25....	24	" 25
Dica, ivory or bone.....	" 20....	30....	24	" 30
Dimities and dimity muslin.....	" 30....	25....	24	(See Cotton.)
Distilled vinegar, medicinal.....	gal. 8 cts....	30....	24	per cent. 30
Diuretic, sal.	per cent. 20....	20....	15	" 30
Divi divi	" 20....	20 ..	free,	free.
Dolls, of every description.....	" 30....	30....	24	per cent. 30
Domets, a flannel .....	....	25....	19	(See Flannel.)
Dominoes, bone or ivory, if any metal.....	" 20....	30....	24	per cent. 30
Dowlas.....	" 25....	25....	15	" 30
Doyleys, cotton.....	" 30....	25....	24	" 30
" woolen	" 40....	25....	24	lb. 12 cts. and p. c. 25
" linen.....	" 25....	20....	15	per cent. 30
Down, all kinds.....	" 25....	25....	19	" 20
Dragons' blood.....	" 10....	15 ..	free,	free.
Drawer knobs of any material...	" 30....	30....	24	per cent. 30
" " entirely of cut glass	lb. 25 cts....	40....	30	" 30
" " plain do..	per cent. 20....	30....	24	" 30
Drawers, Guernsey, wool or worsted	" 30....	30....	24	lb. 12 cts. and p. c. 25
Drawers, knit, without needle- work	" 30....	30....	24	" 12 " " 25
Drawers, silk, wove.....	" 40....	30....	24	per cent. 30
" cotton, wove.....	" 30....	20....	24	" 25
Drawing knives.....	" 30....	30....	24	" 30
" pencils.....	" 25....	30....	24	" 30
Drawings	" 20....	20....	15	" 10
Dried pulp.....	" 20....	20....	15	" 20
Drillings, linen.....	" 25....	20....	15	" 30
" if cotton be a component material, subject to the regula- tions respecting cotton cloths..	" 30....	25....		(See Cotton.)
Drugs, dyeing, not otherwise enu- merated.....	" 20....	20....		per cent. 20
" dyeing or tanning, in a crude state.....	free,....	20 ..	free,	free.
" medicinal, not otherwise enumerated, in a crude state..	per cent. 20....	20....	15	per cent. 20

	1842.	1846. per ct.	1857. per ct.	1861.
Duck, Holland, English, Russia, half-duck, and all other sail ducks.....	sq. yd. 7 cts.....	20....	15	30 c. or less, sq. yd. p. c. 25
Do. do. do.....	sq. yd. 7 cts.....	20....	15	over 30 c. " " 30
Dutch metal, in leaf.....	per cent. 25....	20....	15	per cent. 10
Durants, worsted stuff.....	" 30....	25....	19	" 30
Dust pans.....	" 30....	30....	24	" 20
Dyeing articles, crude.....	" 20....	20....	free,	" free.
Dyeing drugs, and materials for composing dyes, crude, not oth- erwise enumerated.....	" 20....	20....	free,	free.

E.

Earth, in oil.....	lb. 1½ cts.....	30....	24	100 lbs. \$1.35
" brown, red, blue, yellow, dry, as ochre.....	lb. 1 ct.....	30....	15	100 lbs. 35 cts.
Earthenware.....	per cent. 30....	30....	24	per cent. 30
Ebony, manufact' res of, or of which it is the material of chief value	" 30....	40....	30	" 30
Elastic garters.....	" 30....	30....	24	" 30
Elephants' teeth.....	" 5....	5....	free,	free.
Elecampane.....	" 20....	20....	15	per cent. 20
Embroideries, all in gold or silver, fine, or half fine, or other metal	" 20....	30....	24	" 30
Embroidery, if done by hand....	" 30....	30....	24	" 30
Emeralds.....	" 7½..	10....	4	" 5
Emery.....	free,....	20....	8	free.
" cloth, cotton.....	per cent. 30....	25....	24	per cent. 30
Emetic, tartar, medicinal.....	" 20....	30....	24	" 20
Enamelled white.....	" 30....	30....	24	" 20
Engravers' copper, prepared or polished.....	" 30....	30....	24	" 20
Engravers' scrapers & burnishers	" 30....	30....	24	" 20
Engravings, books of, bound or not	" 20....	10....	8	" 10
Epaulettes, all.....	p. ct. 25@30....	30....	24	" 30
Epsom salts.....	per cent. 20....	20....	15	" 20
Equalizing files.....	" 30....	30....	24	" 30
Ergot.....	" 20....	20....	15	" 20
Escutcheons, silver.....	" 30....	30....	24	" 20
" brass, iron, steel, gilt or plated.....	" 30....	30....	24	" 30
Escutcheon pins.....	" 30....	30....	24	" 20
Essence, all.....	" 25....	30....	24	" 30
Estopillas, linen.....	" 25....	20....	15	" 30
Etchings or engravings.....	free,....	10....	8	" 10
Ether.....	per cent. 20....	20....	15	" 20
" sulphuric.....	" 20....	20....	15	" 20
Etoile, or stars for ornaments....	" 30....	30....	24	" 30

	1842.	1846.	1857.	1861.
	per cent.	per ct.	per ct.	per cent.
Extract of belladonna.....	25....30....	24		per cent. 20
“ Campeachy wood.....	“ 20....20....	4		free.
“ cicuta.....	“ 25....30....	24		“ 20
“ colocynth.....	“ 25....30....	24		“ 20
“ elaterium.....	“ 25....30....	24		“ 20
“ gentian.....	“ 25....30....	24		“ 20
“ hyosciamus.....	“ 35....30....	24		“ 20
“ indigo.....	“ 20....20....	4		free,
“ logwood.....	“ 20....20....	4		free,
“ madder.....	“ 20....20....	4		free.
“ nux vomica.....	“ 25....30....	24		per cent. 20
“ opium.....	“ 25....30....	24		“ 20
“ rhatania.....	“ 25....30....	24		“ 20
“ rhubarb.....	“ 25....30....	24		“ 20
“ stramonium.....	“ 25....30....	24		“ 20
Extracts and decoctions of dye woods, not otherwise provided for.....	“ 20....20....	4		“ 20
Extracts, all other.....	“ 20....30....	24		“ 30
Eyes and rods for stairs.....	“ 30....30....	24		“ 30
“ bulls', a bean.....	“ 20....20....	15		“ 10

F.

False collars.....	per cent. 30....30....	24		per cent. 30
Fancy, or perfumed soaps.....	“ 30....30....	24		“ 30
Fancy vials and bottles, uncut....	groes \$2.50....30....	24		“ 30
Fans, all.....	per cent. 25....30....	24		“ 30
Fastenings, shutter or other, of copper, iron, steel, brass, gilt, plated or japanned.....	“ 30....30....	24		“ 30
Fearnought cloth.....	“ 40....30....	24	lb. 12 cts. and p. ct. 25	
Feathers, ornamental.....	“ 25....30....	24		“ 30
“ for beds.....	“ 25....25....	19		“ 20
“ vultures', for dusters..	“ 25....20....	15		“ 20
Feldspar.....	“ 20....20....	15		“ 10
Felting, hatters'.....	“ 25....30....	24		“ 20
Felts, or hat bodies made in whole or in part of wool.....	each 18 cts....20....	15		“ 20
Fennel, essence of.....	per cent. 25....30....	24		“ 30
Ferrets, cotton.....	“ 30....25....	24		“ 30
Ferri, rubigo.....	“ 20....20....	15		“ 20
Fiddles.....	“ 30....20....	15		“ 20
Fids.....	“ 20....20....	15		“ 20
Fifea, bone, ivory, or wood.....	“ 30....20....	15		“ 20
Fig blue.....	“ 20....20....	15		“ 20
Figs.....	lb. 2 cts....40....	8		lb. 3 cts.
Figures, alabaster.....	per cent. 30....40....	30		per cent. 30
“ other.....	“ 30....30....	24		“ 30

	1842.	1846. per ct.	1857. per ct.	1861.
Filberts.....	lb. 1 ct.	30....	24	lb. 1 ct.
File cuts.....	per cent. 30....	30....	24	per cent. 30
Files.....	" 30....	30....	24	" 30
Filtering stones.....	" 20....	30....	24	" 20
" unmanufactured..	" 20....	20....	15	" 10
Fire crackers.....	" 20....	30....	24	" 30
" irons or screens.....	" 30....	30....	24	" 30
Fish, pickled, other than in barrels or half barrels, not specified...	" 20....	20....	15	lb. $\frac{1}{2}$ ct.
Fish, in oil.....	" 20....	40....	30	per cent. 30
" mackerel.....		20....	15	lbb. \$2.00
" " pickled.....	bbl. \$1.50....	20....	15	" \$1.00
" salmon, pickled.....		20....	15	" \$3.00
" other " in bbls.....	" \$1.00....	20....	15	" \$1.50
" glue, called isinglass.....	per cent. 20....	20....	15	per cent. 20
" hooks.....	" 30....	30....	24	" 30
" sauce.....	" 30....	30....	24	" 20
" skins, raw.....	" 30....	20....	15	" 20
" skin cases.....	" 20....	20....	15	" 30
Fisheries of the U. States and their territories, all products of.	free, ..free, ..free,			free.
Fishing nets.....	lb. 7 cts.	30....	24	lb. 6 cts.
Fishing lines, silk.....	lb. 6 cts.	25....	19	per cent. 30
Flags, floor matting, made of.	per cent. 25....	25....	19	" 30
" carpets and carpeting, and floor cloths, made of.	" 25....	25....	19	" 30
Flageolets, wood, bone or ivory..	" 30....	20....	15	" 30
Flannels, all.....	" 40....	25....	19	30 c. or less, p. ct. 25
" ".....	" 40....	25....	19	over 30 cts., " 30
Flap hinges.....	" 30....	30....	24	per cent. 30
Flasks, or bottles, that come in gin cases.....	gross \$2.50....	30....	24	" 30
Flax, powder, brass, copper, ja- panned or horn.....	per cent. 30....	30....	24	" 30
Flat irons.....	lb. 2 $\frac{1}{2}$ cts.	30....	24	lb. 1 ct.
Plata, for making hats or bonnets,	per cent. 30....	30....	24	per cent. 30
Flax, unmanufactured.....	ton \$20....	15 .. free,		ton \$15
" all manufactures of, or of which flax is a component part, not otherwise specified.....	per cent. 25....	20....	15	per cent. 30
Flax seed.....	" 5....	10....	15	bush. 16 cts.
Fleams.....	" 30....	30....	24	per cent. 30
Fleshers.....	" 30....	30....	24	" 30
Flies, Spanish, or cantharides....	free,	20....	8	" 10
Flints.....	free,	5....	4	free.
Flint stone.....	free,	15....	4	free.
Flints, ground.....	free,	20....	4	free.
Float files.....	per cent. 30....	30....	24	per cent. 30
Floor cloth, all stamped, printed, or painted.....	sq. yd. 35 cts.	30....	24	" 30

	1842.	1846. per ct.	1857. per ct.	1861.
Floor cloth, dish or table, mats of	per cent. 25....	30....	24	per cent. 20
“ “ lined with woollen or wool.....	“	40....	30....	24 “ 30
Flor benzoin	“	30....	30....	24 “ 20
Florentine buttons, covered with bombazette over a metal form..	“	30....	25....	19 “ 30
Floss cotton (<i>see Cotton Thread</i>).	“	30....	25....	24 “ 30
Floss silk, and other similar silks purified from the gum.....	“	25....	25....	19 “ 20
Flour of wheat	112 lbs. 70 c....	20....	15	“ 20
“ other grain.....	per cent. 20....	20....	15	“ 20
Flour, sulphur.....	free,....	20....	15	“ 20
Flower water, orange.....	per cent. 20....	30....	24	“ 20
Flowers, artificial.....	“	25....	30....	24 “ 30
Flowers, all, not otherwise pro- vided for.....	“	20....	20....	15 “ 20
Flutes of wood, ivory, or bone...	“	30....	20....	15 “ 20
Foils, fencing	“	30....	30....	24 “ 30
Foil, copper.....	“	30....	30....	24 “ 30
“ silver.....	“	20....	20....	15 “ 30
“ tin	“	2½....	15....	12 “ 10
Fol digitalis.....	“	25....	20....	15 “ 20
Forbidden Fruit.....	“	20....	20....	8 “ 20
Forge hammers.....	lb. 2½ cts....	30....	24	lb. 2 cts.
Forks, all.....	per cent. 30....	30....	24	per cent. 30
Fossils	free, .. free, .. free,			free.
Fox glove	per cent. 20....	20....	15	per cent. 20
Frames, or sticks for umbrellas or parasols.....	“	20....	30....	24 “ 30
“ plated cruet.....	“	30....	30....	24 “ 30
“ quadrant	“	30....	30....	24 “ 30
“ silver cruet	“	30....	30....	24 “ 30
Frankincense, a gum.....	“	25....	20....	8 free.
Fringes, cotton or wool.....	“	30....	25....	24 per cent. 30
“ merino.....	“	30....	25....	19 “ 30
Frizettes, hair or silk.....	“	25....	30....	24 “ 30
Frocks, Guernsey.....	“	30....	30....	24 80 c. or less, p. ct. 25
“ “	“	30....	30....	24 over 30 cts. p. ct. 30
Frosts, glass.....	“	30....	20....	15 “ 30
Fruits, preserved in brandy or sugar.....	“	25....	40....	30 “ 20
“ preserved in their own juice.....	“	20....	20....	15 “ 20
“ pickled.....	“	20....	30....	24 “ 20
“ green, ripe, or dried.....	free, 40, 30 & 20		8	“ 10
Frying pans.....	per cent. 30....	30....	24	“ 30
Fullers' boards.....	“	12½..	30....	24 “ 30
“ earth.....	free,...	10....	8	free.
Fulminates, or fulminating pow- ders	per cent. 20....	20....	15	per cent. 20

	1842.	1846.	1857.	1861.
	per cent.	per ct.	per ct.	per cent.
Furniture, coach and harness....	30....	30....	24	30
" brass, copper, iron or				
steel, not coach or harness....	"	30....	30....	30
Furniture, calico or chintz.....	"	30....	25....	30
" household, not other-				
wise specified	"	30....	30....	30
Fur, dressed, all on the skin....	"	20....	20....	10
" hats or caps of.....	"	35....	30....	30
" hat bodies or felts.....	"	25....	30....	30
" muffs or tippets, or other				
manufactures not specified....	"	35....	30....	30
Furs, hatters, dressed or undress-				
ed, not on the skin.....	"	25....	10....	10
Furs, undressed, all kinds of, on				
the skin	"	5....	10....	10

G.

Galanga	per cent.	20....	20....	15	per cent.	30
Gallengal, or gallengal root....	"	20....	20....	15	"	20
Galloons, gold and silver, fine or						
half fine.....	"	30....	30....	24	"	30
Galls, nut.....	lb. 1 ct.	5....	4			
Gambia (Terra Japonica).....	per cent.	10....	10	free,	free.	
Gamboge, crude or refined.....	"	25....	20....	15	"	10
Game bags, leather or twine....	"	30....	30....	24	"	30
Garance, or madder, manufac-						
tures of.....	"	30....	20	free,	"	30
Garden seeds, not otherwise speci-						
fied.....	free, .. free, .. free,				free.	
Garnets.....	"	7....	10....	4	"	5
" hardware	"	30....	30....	24	"	30
Garters, India rubber, with clasps						
and of wire	per cent.	30....	30....	24	per cent.	30
Gauze, cotton.....	"	30....	25....	24	over 16 cts. p. ct.	25
Gelatine	"	30....	30....	24	per cent.	30
Gems.....	"	7....	10....	4	"	5
" set.....	"	30....	30....	24	"	25
Gentian root.....	"	20....	20....	15	free.	
German silver, manufactured or						
not	"	30....	30....	24	"	30
Gig hames, springs or handles...	"	30....	30....	24	"	30
Gilt fancy wares, jewelry, wire, &c.	"	25....	30....	24	"	30
Gimlets.....	"	30....	30....	24	"	30
Gimps, cotton.....	"	30....	30....	24	"	30
" silk.....	lb. \$2.50	25....	19		"	30
" thread, linen.....	per cent.	30....	20....	15	"	30
" wire being a component						
part, of chief value....	"	30....	30....	24	"	30

	1842.	1846. per ct.	1857. per ct.	1861.
Gin.....	gal.60@90 c.	100....	30	1st proof, gal. 40 cts.
Gin cases, with bottles in them, the cases pay.....	per cent.	30....	30....	24 per cent. 30
and the bottles.....	"	30....	30....	24 " 30
Ginger, green, ripe, dried, pre- served, or pickled.....	lb. 2 cts.	40 & 30	15	" 10
Ginghams, as cottons.....	per cent.	30....	25....	24 (See Cotton.)
Ginseng.....	"	20....	20....	15 per cent. 20
Girandoles.....	"	30....	30....	24 " 30
Glass, all articles not specified... " crown, plate, polished or other window, not over 10 X 15..		....	30....	24 sq. foot 1½ cts.
" 16 X 24..		....	30....	24 " 2½ cts.
" 24 X 30..		....	30....	24 " 4 cts.
over 1½ lb. per sq. ft. on exc.		....	30....	24 " 4 cts.
" apothecaries' vials, 16 oz..	gross \$2.25....	30....	24	per cent. 30
" bottles, black.....	various....	30....	24	" 30
" broken.....	....	20 ..	free,	free.
" old, unbroken.....	....	20 ..	free,	free.
" buttons, cut, entirely of....	lb. 35 cts....	25....	19	" 30
" colored.....	per cent.	30....	30....	24 " 30
" cut, engraved, colored, &c.	....	40....	30	" 30
" disks, optical .....	....	30....	24	" 10
" green, pocket bottles.....	various....	30....	24	" 30
" looking, plates, silvered ..	"	....	30....	24 " 30
" manufactures of, all vessels or wares, of cut glass..	lb. 25 cts....	40....	30	" 30
" manufactures of, all others not specially mentioned.	per cent.	25....	30....	24 " 30
" of antimony.....	"	30....	30....	15 " 20
" paintings on.....	"	30....	30....	24 " 30
" pressed, plain or mould, not cut, colored or engraved.....	....	30....	24	" 25
Glass, rough plate, cylinder, not over 10 X 15.....	....	20....	15	sq. foot 1 ct.
" 16 X 24.....	....	20....	15	" 1½ cts.
" 24 X 30.....	....	20....	15	" 2 cts.
" 24 X 30, and not over 1 lb. per sq. ft..	....	20....	15	" 3 cts.
over 1 lb. per sq. ft. pays an additional duty on the excess on the same rates.				
Glasses, hour.....	per cent.	25....	30 ..	24 per cent. 30
Glauber salts.....	"	30....	20....	15 " 20
Glaziers' diamonds.....	"	25....	15....	12 " 10
Globes.....	"	30....	30....	24 " 20
Gloves	doz. \$1.50....	30....	24	" 20
" hair.....	per cent.	25....	25....	19 " 30
Glue, all.....	lb. 5 cts....	20....	15	" 20

	1842.	1846. per ct.	1857. per ct.	1861.
Goats' hair.....	lb. 1 c....	20 .. free,	lb. 18 c. or less, p. c. 5	
" "	lb. 1 c....	20 .. free,	18@24 cts. lb. 3 cts.	
" "	lb. 1 c....	20 .. free,	over 24 cts. lb. 9 cts.	
" skins, raw.....	per cent. 5....	5.... 4	per cent. 5	
" " tanned.....	doz. \$1.00....	20.... 15	" 20	
Gold, all articles composed of....	per cent. 30....	30.... 24	" 30	
Gold and silver leaf.....	" 20....	15.... 12	" 20	
" beaters' brine.....	" 20....	20.... 15	" 20	
" " moulds.....	" 10....	10.... 8	" 20	
" " skins	" 10....	10.... 8	" 10	
" dust.....	free, .. free, .. free,		free.	
" embroideries.....	" 30....	30.... 24	" 30	
" muriate of.....	" 25....	30.... 24	" 20	
" oxide of.....	" 25....	30.... 24	" 20	
" paper, in sheets, strips, or other forms	" 30....	30.... 24	" 20	
" shell for painting.....	" 20....	30.... 24	" 20	
" size	" 20....	20.... 15	" 20	
" studs.....	" 20....	30.... 24	" 30	
Golo shoes or clogs.....	" 30....	30.... 24	" 30	
Gouges.....	" 30....	30.... 24	" 30	
Gown patterns, wool being a com- ponent part	" 40....	30.... 24	lb. 12 cts. and p. ct. 25	
Grains, towed.....	" 35....	20.... 15	per cent. 30	
Grain tin	" 20....	20.... 15	" 10	
Granulated tin.....	" 20....	20.... 15	" 10	
Grapes, not dried	" 20....	30.... 8	" 20	
Grass and cotton cloth, as cottons	" 25....	25.... 24	(See Cotton.)	
" bags.....	sq. yd. 5 cts....	30.... 24	yd. 10 c. or less lb. 1½ cts.	
" "	" 5 cts....	30.... 24	yd. over 10 cts. lb. 2 cts.	
" flats, braids, or plaits.....	per cent. 35....	30.... 24	per cent. 20	
" hats or bonnets.....	" 35....	30.... 24	" 30	
" henguin.....	" 25....	25.... 19	" 20	
" Sisal, mata, of flags and rope.....	ton \$25....	25.... 19	" 20	
Grasshopper springs.....	per cent. 30....	30.... 24	" 30	
Grease	" 10....	10.... 8	" 10	
Green turtle.....	" 20....	20.... 15	" 10	
Gridiron.....	" 30....	30.... 24	" 30	
Grindstones	free,....	5.... 4	" 10	
" unfinished.....	free,....	5.... 4	free.	
Guava jelly, or paste.....	" 30....	30.... 24	" 20	
Guernsey frocks	" 30....	30.... 24	" 25@30	
Gunny bags.....	sq. yd. 5 cts....	20.... 15	lb. 1½@2 cts.	
Guano	free, .. free, .. free,		free.	
" imitation of.....	free,....	20 .. free,	free.	
Guimauve, or camomile.....	per cent. 20....	20.... 15	per cent. 20	
Guinea grains.....	" 20....	20 .. free,	" 10	
Guitars.....	" 30....	20.... 15	" 20	
Guitar strings, gut	" 30....	20.... 15	" 20	

	1842.	1848.	1857.	1861.
		per ct.	per ct.	
Gum Benzoin, or Benjamin.....	per cent. 15....	30....	8	free.
" copal.....	" 15....	10....	8	per cent. 10
" elastic articles.....	" 20....	30....	24	" 30
" Senegal, Arabic and Traganth, Barbary, East India and Jedda, and all other resinous substances not specified, in a crude state.....	" 15....	10....	8	free.
Gum purdu, as opium.....	" 15....	20....	15	per cent. 10
" substitute, burnt flour and starch.....	" 15....	10....	8	" 10
Gums, medicinal, in a crude state,	" 15....	20....	15	" 10
Gun locks.....	" 30....	30....	24	" 30
Gunny cloth.....	sq. yd. 5 cts....	20....	15	lb. 1½ @ 2 cts.
Gunpowder.....	lb. 8 cts....	20....	15	per cent. 20
Guns (except muskets and rifles),	" 30....	30....	24	" 30
Gun wadding of paper.....	" 25....	30....	24	" 30
Guts, sheeps', salted.....	" 20....	20....	15	" 20
Gutta percha, unmanufactured ..	....	20....	4	free.
Gypsum, or plaster of Paris.....	free, ..	free, ..	free,	free.
" " " ground,	free, ..	free, ..	free,	" 10

H.

Hackels, all.....	per cent. 30....	30....	24	per cent. 30
Hair, Angora goats', raw, 18 cts. or less.....	lb. 1 ct....	20 ..	free,	" 5
" do. do. over 18 cts.,	" 1 ct....	20....	15	lb. 3 cts.
" all other manufactures of goats' or mohair.....	per cent. 25....	25....	19	per cent. 30
" belts and brooms.....	" 30....	30....	24	" 25
" bracelets, chains, ringlets, and curls.....	" 25....	30....	24	" 30
" braids, for the head.....	" 25....	30....	24	" 30
" cloth.....	" 25....	25....	19	" 25
" curled, for beds.....	" 20....	20....	15	" 20
" for head dresses.....	" 25....	30....	24	" 30
" gloves.....	" 25....	25....	19	" 20
" nets.....	" 25....	30....	24	" 30
" pencils.....	" 20....	30....	24	" 30
" pins.....	" 30....	30....	24	" 30
" prepared and cleaned for use	" 20....	30....	24	" 30
" powder, not perfumed.....	" 20....	20....	15	" 20
" powder, perfumed, all others not specified.....	" 20....	30....	24	" 20
" seating.....	" 25....	25....	19	" 25
" unmanufactured.....	" 10....	10....	8	" 10
" " uncleaned..	" 10....	10....	8	free.
Hames, wood.....	" 35....	30....	24	" 30

	1842.	1846. per ct.	1857. per ct.	1861.
Hammers, not blacksmiths'	per cent. 30	30	24	per cent. 30
Hams, bacon	lb. 3 cts.	20	15	lb. 2 cts.
Handkerchiefs, linen	"	25	20	(See <i>Linen</i>) " 25@30
" silk	lb. \$2.50	25	19	(See <i>Silk</i>) " 20@30
" cotton	per cent. 30	25	24	(See <i>Cotton</i>)
Handles for chests	per cent. 30	30	24	per cent. 30
Hangers	"	30	30	" 30
Hangings, paper	"	35	20	" 30
Hares' hair, or fur	"	25	10	per cent. 10
Hare skins, undressed	"	5	10	" 10
" " dressed	"	20	20	" 20
Harlaem oil	"	20	30	" 20
Harness	"	35	30	" 30
" furniture	"	30	30	various, " 30
Harp strings, gut	"	15	20	" 20
" wire	"	15	30	" 20
Harps and harpaichords	"	30	20	" 20
Hartshorn	"	20	30	" 20
Hatchets	"	30	30	" 30
Hat felts, or bodies, of wool, not put in form or trimmed	each 18 cts.	20	15	" 20
Hat bodies, cotton	per cent. 30	30	24	" 30
Hats, Leghorn	"	35	30	" 30
" of chip, straw, or grass	"	35	30	" 30
" of wool	each 18 cts.	20	15	" 30
" all other	per cent. 30	30	24	" 30
Hatters' irons	"	30	30	" 30
Hautboys	"	30	20	" 20
Haversacks, of leather	"	35	30	" 30
Hayknives	"	30	30	" 30
Head-dresses, ornaments for	"	30	30	" 20
Head pieces for stills	"	30	30	" 30
Hearth rugs, all	"	40	30	" 30
Hellebore root	"	20	20	" 20
Hemlock	"	20	5	" 20
Hemp, all manufactures of, not otherwise specified	"	20	20	15 { yd. 30 c. or less p.c. 25 over 30 cts. yd. " 30
Hemp—a component part	"	20	20	15 per cent. 20
" Manilla	ton \$25	25	19	ton \$15
" seed	per cent. 20	10	8	bush. 10 cts.
" unmanufactured	ton \$40	30	24	ton \$35
Henbane	ton \$20	20	15	per cent. 20
Herrings	bbl. \$1.50	20	15	bbl. \$1.00
Hessians	per cent. 25	20	15	per cent. 30
Hides, raw and salted	"	5	5	" 5
" tanned	"	20	20	" 20
Hobby horses	"	30	30	" 30
Hods	"	30	30	" 30
Hoes	"	30	30	" 30
Hollands, brown	"	25	20	15 (See <i>Linen</i>) 25@30

	1842.	1848. per ct.	1857. per ct.	1861.
Hollow ware, tinned	per cent. 30....	30....	24....	lb. 2½ cts.
Hones	" 20....	20....	15....	per cent. 20
Honey and honey water	" 20....	30....	24....	gal. 10 cts.
Hooks, all	" 30....	30....	24....	per cent. 30
Hooks and eyes	" 30....	30....	24....	" 30
Hops	" 20....	20....	15....	" 10
Horn combs	" 25....	30....	24....	" 30
" plates for lanterns	" 20....	5....	4....	" 20
" tips	" 5....	5....	4....	" 10
Horns	" 5....	5....	4....	" 10
Household furniture	" 30....	30....	24....	" 30
" " of cedar, gra-				
nadilla, ebony, mahogany, rose,				
and satin wood	" 30....	40....	30....	" 30
Hungary water	" 25....	30....	24....	" 20
Hyacinth roots	free, ..	free, ..	free,	free.
Hydriodate of potash	" 20....	20....	15....	" 15
Hydrometers, of glass	" 25....	30....	24....	" 30

I.

Ice	free,	20 ..	free,	free.
Imitation of precious stones	per cent. 7....	10....	8	per cent. 25
Implements of trade of persons arriving in the United States ..	free, ..	free, ..	free,	free.
India grass	ton \$25....	25....	19	ton \$15
" rubber, unmanufactured ..	free,	10....	4	free.
" " boots and shoes ..	per cent. 30....	30....	24	per cent. 20
" " other manufactures of India rubber ..	" 30....	30....	24	" 20
" " milk of	" 30....	20....	4	free.
" " suspenders	" 30....	30....	24	" 20
" " webbing	" 30....	30....	24	" 30
Indian meal	112 lbs. 20 c....	20....	15	" 10
" corn	bush. 10 cts....	20....	15	bush. 10 cts.
Indigo	lb. 5 cts....	10....	4	free,
Indispensables, or bags, leather ..	per cent. 35....	30....	24	per cent. 30
" " merino stuff ..	" 30....	25....	19	" 30
" " silk	" 30....	25....	19	" 30
" " bead	" 30....	30....	24	" 30
Ink	" 25....	30....	24	" 30
Ink powder	" 25....	30....	24	" 30
Ink stands, glass cut	various....	40....	30	" 30
" all other	"	30....	24	" 25
Instruments, philosophical	"	30....	24	" 20
" " specially imported	free, ..	free, ..	free,	free.
Instruments, musical	per cent. 30....	20....	15	per cent. 20
Inventions, model of	free, ..	free, ..	free,	free.

	1842.	1846. per ct.	1857. per ct.	1861.
Iodine.....	per cent. 20....	20....	15	per cent. 10
" salts of.....	" 20....	20....	15	" 15
Ipecac, or ipecacuanha.....	" 20....	20....	15	" 10
Iris root.....	" 20....	20....	15	free.
Iridium.....	" 20....	20....	15	free.
Iron, anchors.....	lb. 3 cts....	30....	24	lb. 1½ cts.
" anvils.....	lb. 2½ cts....	30....	24	" 1½ cts.
" axles, and malleable iron in castings.....	lb. 4 cts....	30....	24	lb. 2 cts.
" band, hoop and slit rods, all other.....	lb. 2½ cts....	30....	24	ton \$20
" bars, flat—1@7 in. wide, and ½@2 in. thick (not less than 20 per cent.).....	ton \$25....	30....	24	" \$15
" bars, round, ¼@4 in.diam. do.	" \$25....	30....	24	" \$15
" " square, ½@4 in. sq're do.	" \$25....	30....	24	" \$15
" bed screws and wrought hinges.....	per cent. 30....	30....	24	lb. 1½ cts.
" blacksmith hamm. & sledges	lb. 2½ cts....	30....	24	" 2 cts.
" boiler plates.....	" 2½ cts....	30....	24	ton \$20
" cables, chains and parts.....	" 4 cts....	30....	24	lb. 1½ cts.
" cast iron vessels, sads, tailor's & hatters', stoves, and stove plates.....	" 1½ cts....	30....	24	lb. 1 c.
" cast iron pipe, steam, gas and water.....	" 1½ cts....	30....	24	lb. ½ c.
" cast iron butts and hinges..	" 2½ cts....	30....	24	lb. 2 cts.
" castings, all other.....	lb. 1 c....	30....	24	per cent. 25
" chains, trace, halter and fence of rod over ½ in.....	lb. 4 cts....	30....	24	lb. 1½ cts.
" do. do. ¼@½ in.....	" 4 cts....	30....	24	" 2 cts.
" do. do. No. 9@¾ in.....	" 4 cts....	30....	24	" 2½ cts.
" do. do. less than No. 9..	" 4 cts....	30....	24	per cent. 25
" cut tacks, brads, and sprigs, not over 16 oz. per M. ...	M. 5 cts....	30....	24	M. 2 cts.
" do. do. over 16 oz. per M.	M. 5 cts....	30....	24	lb. 2 cts.
" galvanized or zinc-coated...	per cent. 30....	30....	24	" 2 cts.
" hollow ware, glazed or tinned	lb. 2½ cts....	30....	24	" 2½ cts.
" liquor.....	per cent. 30....	30....	24	per cent. 10
" nails and spikes, cut.....	lb. 4 cts....	30....	24	lb. 1 ct.
" nails, spikes, rivets and bolts, wrought.....	lb. 3@4 cts....	30....	24	lb. 2 cts.
" nails, horseshoe.....	lb. 4 cts....	30....	24	" 3½ cts.
" other, rolled and hammered	ton \$25....	30....	24	ton \$20
" pig and old scraps (not less than 20 per cent.).....	ton \$9....	30....	24	ton \$6
" railroad, not over 6 in. high (not less than 20 p. c.)....	ton \$25....	30....	24	ton \$12
" sheet, smooth or polished..	lb. 2½ cts....	30....	24	lb. 2 cts.

	1842.	1846. per ct.	1857. per ct.	1861.
Iron, sheet, all other not thinner than No. 20 wire	lb. 2½ cts....	30....	24	ton \$20
" sheet, No. 20@25	lb. 2½ cts....	30....	24	" \$25
" " thinner than No. 25..	lb. 2½ cts....	30....	24	" \$30
" slabs, blooms, loops, and more wrought than pig, and less than bars.....	ton \$17....	30....	24	ton \$15
" taggers' irons.....	per cent. 30....	30....	24	per cent. 10
" wood screws, 2 in. or less..	lb. 12 cts....	30....	24	lb. 8 cts.
" " over 2 in.....	" 12 cts....	30....	24	" 5 cts.
" " " wash'd or plat.	per cent. 30....	30....	24	per cent. 30
" wrought for mill, mill cranks, ships, locomotives, steam engines, or parts, not less than 25 lbs.	lb. 4 cts....	30....	24	lb. 1½ cts.
" wrought railroad chains, nuts, and punched washers,	....	30....	24	ton \$25
" wrought tubes, steam, gas, and water	lb. 5 cts....	30....	24	lb. 2 cts.
" all other manufactures	per cent. 30....	30....	24	per cent. 30
Isinglass.....	" 20....	20....	15	" 20
Issue peas	" 20....	30....	24	" 20
" plaster	" 20....	30....	24	" 20
Ivory	free	5 ..	free,	free.
" black.....	lb. ¾ ct....	20 ..	free,	" 10
" manufactures of.....	per cent. 20....	30....	24	" 30
" nuts.....	free,....	5....	4	free.
" vegetable, manufactures of.	" 20....	80....	24	" 30

J.

Jack chains and screws.....	per cent. 30....	30....	24	per cent. 30
Jacks for piano fortes	" 30....	20....	24	" 30
" clothier's.....	" 30....	30....	24	" 30
Jalap	" 20....	20....	15	" 10
Japanned ware, of all kinds....	" 30....	30....	24	" 30
Jellies, and all similar preparations	" 30....	30....	24	" 30
Jerk beef	lb. 2 cts,....	20....	15	lb. 1 ct.
Jet, real or composition	per cent. 20....	30....	24	per cent. 30
Jewelry	" 20....	30....	24	" 25
" false, so called	" 25....	30....	24	" 25
Joints, India.....	" 30....	30....	24	" 30
Jostic, or jos light.....	" 30....	20....	15	" 20
Juice of oranges	" 20....	20....	15	" 20
Juniper berries	" 20....	20....	15	" 10
" plants	" 20 ..	free, ..	free,	free.
Junk, old	free, ..	free, ..	free,	free,
Jute	ton \$25....	25....	19	ton \$10
" carpeting	per cent. 30....	30....	15	sq. yd. 4 cts.

	1842.	1846. per ct.	1857. per ct.	1861.
Jute bagging, 10 c. p. yd. or less..	per cent. 30....	20....	15	lb. 1½ cts.
" " over 10 c. p. yd....	" 30....	20....	15	" ½ ct.
" butts.....	" 25....	20....	15	ton \$5

K.

Kaleidoscopes.....	per cent. 30....	30....	24	per cent. 30
Kalydor.....	" 30....	30....	24	" 30
Kelp.....	free....	10....	8	free.
Kentledge.....	lb. 1 ct....	30....	24	" 20
Kermes.....	free....	5....	4	" 10
" (mineral).....	per cent. 20....	15....	12	" 10
Kersey ratteen.....	" 40....	30....	24	lb. 12 cts. and p. ct. 25
Kerseys.....	" 40....	30....	24	lb. 12 cts. and p. ct. 25
Kerseymere.....	" 40....	30....	24	lb. 12 cts. and p. ct. 25
Kerstes.....	" 20....	20....	15	per cent. 20
Kettles, brass, in nests.....	lb. 12 cts....	30....	24	" 30
" cast iron or copper.....	lb. 1½ cts....	30....	24	" 30
Keys, watch, of gold or silver...	per cent. 20....	30....	24	" 30
" all other, of iron, brass, copper, gold, or silver.....	" 30....	30....	24	" 30
Kilmarnock caps.....	" 40....	30....	24	" 30
Kirachenwasser.....	gal. 60 cts. .	100....	30	gal. 50 cts.
Knitting needles.....	per cent. 20....	20....	15	per cent. 20
Knives, all, of iron, steel, copper, brass, pewter, lead, or tin....	" 30....	30....	24	" 30
Knobs, brass, gilt, plated, or washed, iron, steel, copper, or brass.....	" 30....	30....	24	" 30
Knobs, cut glass.....	" 30....	40....	30	" 30
" glass, not cut.....	" 30....	30....	24	" 25
" " with brass, iron, steel, or composition shanks...	" 30....	30....	24	" 25
Knockers.....	" 30....	30....	24	" 30
Kreosote.....	" 30....	30....	24	" 20

L.

Labels, decanter or other, gilt or plated.....	per cent. 30....	30....	24	per cent. 30
Labels, decanter or other, gold or silver.....	" 30....	30....	24	" 30
Labels, printed.....	" 30....	20....	24	" 20
Lac dye.....	free....	5....	4	free.
Lac marine.....	" 20....	20....	15	" 30
" spirits.....	free....	20....	4	free.

	1842.	1846.	1857.	1861.
	free, . . .	per ct. 20 . . .	per ct. 4	free.
Lac sulphur				
Lace, all kinds of, made into wear- ing apparel.	per cent. 30 . . .	30 . . .	24	per cent. 30
Lace, bobbinet.	" 20 . . .	25 . . .	24	" 30
" bobbinet veils, cotton.	" 30 . . .	30 . . .	24	" 30
" coach, worsted or silk.	" 35 . . .	25 . . .	19	" 30
" shawls, if sewed.	" 30 . . .	30 . . .	24	" 30
" caps, pelerines, chemisettes, handkerchiefs, collars and capes, veils, cotton.	" 40 . . .	30 . . .	24	" 30
Laced boots or booties.	" 30 . . .	30 . . .	24	" 30
Laces, all thread.	" 15 . . .	20 . . .	15	" 30
" gold and silver.	" 15 . . .	30 . . .	24	" 30
Lacets, or lacings, silk or cotton. .	" 30 . . .	25 . . .	19	" 30
Lacquered ware.	" 30 . . .	30 . . .	24	" 30
Ladle heads.	" 30 . . .	30 . . .	24	" 30
Ladles, iron, tin, Britannia, brass, copper or gilt.	" 30 . . .	30 . . .	24	" 30
Lake, (water colors).	" 20 . . .	30 . . .	24	" 30
" drop, do.	" 20 . . .	30 . . .	24	" 30
" paints.	" 20 . . .	30 . . .	24	" 30
Lampblack.	" 20 . . .	20 . . .	15	" 20
Lamp hooks or pulleys, brass, cop- per, iron, or wood.	" 30 . . .	30 . . .	24	" 30
Lamps, brass, copper, tin, or plain glass.	" 30 . . .	30 . . .	24	" 30
Lamps, cut glass.	lb. 45 cts. . . .	40 . . .	30	" 30
" with glass chimneys.	per cent. 20 . . .	30 . . .	24	" 30
Lancet cases.	" 35 . . .	30 . . .	24	" 30
Lancets.	" 30 . . .	30 . . .	24	" 30
Lantern leaves, or horn plates. . .	" 20 . . .	5 . . .	4	" 20
Lanterns, japanned, tin, gilt, plat- ed, brass, pewter, or copper. . .	" 30 . . .	30 . . .	24	" 30
Lapis calaminaris.	" 20 . . .	20 . . .	15	" 20
" infernalis.	" 20 . . .	20 . . .	15	" 20
" tutia.	" 20 . . .	20 . . .	15	" 20
Lard.	lb. 3 cts. . . .	20 . . .	15	lb. 2 cts.
Larding pins.	per cent. 30 . . .	30 . . .	24	per cent. 30
Lasting, in strips, for buttons, shoes, or booties.	" 5 . . .	5 . . .	4	free.
Latches, iron, brass, steel, gilt, plated, washed, or copper. . . .	" 30 . . .	30 . . .	24	" 30
Lath.	" 20 . . .	20 . . .	15	" 20
Lattin, brass.	" 30 . . .	30 . . .	24	" 30
Laudanum.	" 25 . . .	30 . . .	24	" 30
Lavender, dry, flower of.	" 25 . . .	20 . . .	15	" 30
" flower.	" 25 . . .	20 . . .	15	" 30
" water.	" 25 . . .	30 . . .	24	" 30
Lawn, cotton.	" 30 . . .	25 . . .	24	(See Cotton.)
" linen.	" 25 . . .	20 . . .	15	30 cts. or less p.ct. 25

	1842.	1846. per ct.	1857. per ct.	1861.
Lawn, linen.....	per cent. 25....	20....	15	over 30 cts. p.ct. 30
“ or long lawn, linen.....	“ 25....	20....	15	p. ct. 25@30
Lead, all manufactures of, not otherwise specified.....	“ 30....	30....	24	per cent. 30
“ black.....	“ 20....	20....	15	“ 10
“ busts.....	“ 30....	30....	24	“ 30
“ combs.....	lb. 4 cts....	30....	24	“ 30
“ in any other form not specified.....	“ 4 cts....	30....	24	“ 30
“ in bars.....	“ 3 cts....	20....	15	lb. 1 ct.
“ in pigs.....	“ 3 cts....	20....	15	“ 1 ct.
“ in sheets.....	“ 4 cts....	20....	15	lb. 1½ cts.
“ nitrate of.....	per cent. 20....	20....	15	per cent. 20
“ old.....	lb. 1 ct....	20....	15	lb. 1 ct.
“ ore.....	lb. 4 cts....	20....	15	“ 1½ cts.
“ pencils.....	per cent. 20....	30....	24	per cent. 30
“ pipes.....	lb. 4 cts....	20....	15	lb. 1½ cts.
“ pots, black.....	per cent. 20....	30....	24	per cent. 10
“ powder of black.....	“ 20....	20....	15	“ 10
“ scrap.....	lb. 1 ct....	20....	15	lb. 1 ct.
“ shot.....	lb. 4 cts....	20....	15	lb. 1½ cts.
“ sugar of.....	“ 4 cts....	20....	15	“ 3 cts.
“ toys.....	“ 4 cts....	30....	24	“ 30 cts.
“ white.....	“ 4 cts....	20....	15	“ 1½ cts.
Leaders, leather.....	per cent. 35....	30....	24	per cent. 30
“ worsted.....	“ 40....	25....	19	“ 30
Leather & all manufactures where leather is chief value.....	“ 35....	30....	24	“ 30
“ bracelets, elastic.....	“ 35....	30....	24	“ 30
“ garters, elastic.....	“ 35....	30....	24	“ 30
“ calf, tanned.....	lb. 8 cts....	30....	24	“ 25
“ patent.....	“ 8 cts....	20....	19	“ 30
“ sole.....	“ 6 cts....	20....	15	“ 20
“ upper.....	“ 8 cts....	20....	15	“ 20
Leaves for dyeing, in a crude state.....	free,...	20 ..	free,	free.
“ boucho.....	per cent. 20....	20....	4	free.
“ medicinal, in a crude state.....	“ 20....	20....	15	free.
“ other, not otherwise provided for.....	“ 20....	20....	15	“ 10
Leeches.....	free,...	20 ..	free,	free.
Lees, wine, liquid.....	“ 20....	20....	15	“ 40
Leghorn, and all hats or bonnets of straw, chip, or grass.....	“ 35....	30....	24	“ 30
Leghorn flats, braids, crowns, or plaits.....	“ 35....	30....	24	“ 30
Lemons, in bulk or in boxes, barrels or casks.....	“ 20....	20....	8	“ 10
“ juice.....	“ 20....	10....	8	“ 10
“ peel.....	“ 20....	20....	15	“ 10
Leno, linen.....	“ 25....	20....	15	“ 25@30

	1842.	1846.	1857.	1861.
	per cent.	per ct.	per ct.	per cent.
Leno, muslin.....	25....25	25	24	per cent. 25@30
Leopard skins, raw.....	" 5.... 5	4		per cent. 5
" " dressed.....	doz. \$1.00....20	15		" 20
" spot cloth.....	per cent. 40....30	24		(See Woollens.)
Lime.....	" 20....10	8		per cent. 10
" acetate of.....	" 20....20	15		" 20
" juice.....	" 20....10	8		" 10
Limes.....	" 20....20	8		" 10
Linen bags.....	" 25....20	15		lb. 1 1/2 cts.
" canvas, black.....	" 25.... 5	4		" 30
" mitts.....	" 25....30	24		" 30
" tape.....	" 25....20	15		" 30
Linens, bleached or unbleached..	" 25....20	15		30 c. or less, p. ct. 25
" do. do.....	" 25....20	15		over 30 cts, " 30
" all manufactures of, not otherwise specified....	" 25....20	15		per cent. 30
Lines, fishing.....	lb. 6 cts....30	24		" 20
" worsted.....	per cent. 30....25	19		" 30
Links, coat.....	" 25....25	19		" 30
Linseed.....	" 5....10	free.		bush. 16 cts.
Linseed cakes or meal.....	" 20....20	15		per cent. 20
Linsey woolsey.....	" 40....30	24		lb. 12 cts. and p. ct. 25
Lint.....	" 20....20	15		per cent. 30
Liqueurs or cordials, all.....	gal. 60 cts. .100	30		gal. 50 cts.
Liquor, iron.....	per cent. 20....20	15		per cent. 10
" purple.....	" 20....20	15		" 20
" red.....	" 20....20	15		" 20
" tin.....	" 20....20	15		" 20
" cases.....	" 30....30	24		" 30
Liquorice paste or juice.....	" 25....20	15		lb. 3 cts.
" root.....	" 25....20	15		free.
Litharge.....	lb. 4 cts....20	15		lb. 1 1/2 cts.
Lithographic stones.....	per cent. 20....20	15		per cent. 20
Lithontriptions.....	" 30....30	24		" 30
Litmus.....	" 20....20	4		" 10
Loadstones.....	" 30....30	24		" 20
Lotions, all cosmetic.....	" 25....30	24		" 30
Lozenges, all medicinal.....	" 20....30	24		" 20
Locks, all.....	" 30....30	24		" 30
Long cloths, linen.....	" 25....20	15		" 25@30
Looking-glasses, plates or frames,	" 30....30	24		" 30
Lunar caustic.....	" 30....30	24		" 20
Lustres, glass, cut.....	lb. 45 cts....40	30		" 30
" brass and glass.....	" 30....30	24		" 30
Lutes.....	" 30....20	15		" 20
Lye, soda.....	" 20....20	15		" 20

M.

	1842.	1846. per ct.	1857. per ct.	1861.
Maccaroni.....	per cent. 30....	30....	24	per cent. 30
Mace.....	lb. 50 cts....	40....	4	lb. 15 cts.
Machinery, models of, and other inventions.....	free, ..	free, ..	free,	free.
Machinery for the manufacture of flax and linen goods.....	per cent. 30....	30....	8	free.
Madder.....	free,....	5 ..	free,	free.
Madder root.....	free,....	5 ..	free,	free.
Madras handkerchiefs, cotton....	" 30....	25....	24	per cent. 30
Magic lanterns.....	" 30....	30....	24	" 30
Magnesia.....	" 20....	30....	24	" 20
" carbonate of.....	" 20....	30....	24	" 30
" sulphate of.....	" 20....	20....	15	" 20
Mahogany, unmanufactured....	" 15....	20....	8	free.
" manufactured.....	" 30....	30....	24	" 30
Mallets, wood.....	" 30....	30....	24	" 30
Malt.....	" 20....	20....	15	" 20
Manganese.....	" 20....	20....	15	" 10
Mangoes.....	" 20....	20....	15	" 10
Mangroves, or shells of.....	" 20....	20....	15	" 10
Manilla grass.....	ton \$25....	25....	19	ton \$15
Manna.....	per cent. 20....	20....	15	per cent. 10
Mantillas, silk.....	" 30....	30....	24	" 30
Mantles.....	" 30....	30....	24	" 30
Manufactured tobacco.....	lb. 10 cts....	40....	30	" 20
Maps.....	free,....	10 ..	free,	free.
Marble busts, as statuary.....	free,....	30 ..	free,	per cent. 10
" manufactures of.....	per cent. 30....	30....	24	" 30
" table tops.....	" 30....	30....	24	" 30
" unmanufactured.....	" 25....	20....	15	" 30
Marbles, toy, baked or stones....	" 30....	30....	24	" 30
Marine coral.....	" 20....	20....	15	free.
Marmalade, a sweetmeat.....	" 30....	40....	30	" 30
Marrow.....	" 10....	10....	8	" 10
Marsh mallows.....	" 20....	20....	15	" 20
Mastic, crude.....	" 15....	20....	8	" 10
" refined.....	" 20....	20....	8	" 20
Mathematical instruments for col- leges and schools.....	free, ..	free, ..	free,	free.
Mathematical instruments.....	" 30....	30....	24	" 20
Matches for pocket lights.....	" 20....	30....	24	" 30
Mats, cocoa nut.....	" 25....	20....	15	" 20
" if wool be a component part	" 30....	30....	24	" 30
" oil or floor cloth, dish or table.....	" 30....	30....	24	" 30
" sheepskins.....	" 30....	30....	24	" 50

	1842.	1846. per ct.	1857. per ct.	1861.
Mats, table, tow, straw or flag... per cent.	25	25	19	per cent. 20
" " wood	"	25	30	" 30
Matting, cocoa nut.....	"	25	20	" 20
" all floor of flags, jute or grass.....	"	25	25	" 20
Mattresses, hair or moss, linen tick.....	"	20	20	" 30
Meal	"	20	20	" 10
Meats, prepared.....	"	30	40	" 30
Medals and other antiquities....	free	.. free	.. free	free.
Medicinal preparations, not other- wise specified.....	"	20	30	" 30
Medicinal drugs, roots, and leaves, in a crude state, not otherwise specified.....	"	20	20	" 20
Metal, plated	"	30	30	" 30
Metallic pens.....	"	25	30	" 30
" slates, paper or tin.....	"	30	25	" 30
Metals, unmanufactured, not oth- erwise provided for.....	"	30	30	" 20
Melting or glue pots, if earthen..	"	30	30	" 20
Mercury or quicksilver.....	"	5	20	" 10
" all preparations of.....	"	25	25	" 20
Merino cloth, entirely of combed wool.....	"	40	25	lb. 12 cts. and p. c. 25
" cloth, wool.....	"	40	30	" 12 " " 25
" fringe, worsted..... per cent.	30	25	19	per cent. 30
" shawls, of wool.....	"	40	30	lb. 12 cts. and p. c. 25
" " body worsted or combed wool.....	"	40	30	" 12 " " 25
" shawls, border woollen fringe, sewed on.....	"	40	30	" 12 " " 25
" trimmings, worsted.....	"	30	25	per cent. 30
Manilla hemp..... ton	\$25	25	19	ton \$15
Mica..... per cent.	20	20	15	per cent. 20
Milk of roses.....	"	25	30	" 30
Millinery of all kinds.....	"	40	30	" 30
Millepedes.....	"	25	20	" 20
Mill saws..... each	\$1	30	24	wide 9 in. or l'ss ft. 12½ c.
"	each	\$1	30	24 over 9 in. wide ft. 20 c.
Mills, coffee..... per cent.	30	30	24	per cent. 30
Miniature cases, ivory.....	"	30	30	" 30
" sheets, ivory	"	30	30	" 30
Miniatures	free	.. free	.. free	free.
Mineral and bituminous substan- ces, in a crude state, not other- wise provided for.....	"	30	20	" 20
Mineral blue.....	"	20	15	free.
" salt, crude.....	"	20	20	" 10
" water	"	30	30	" 30

	1842.	1846. per ct.	1857. per ct.	1861.
Mock pearls.....	per cent. 20....	10....	8	per cent. 5
Modelling, specially imported....	free, ..	free, ..	free,	free.
Modelling, not specially imported,	" 30....	30....	24	" 30
Models of invention, not for use..	free, ..	free, ..	free,	free.
Molasses.....	lb. 4½ cts....	30....	24	gal. 2 cts.
" concentrated.....	" 4½ cts....	30....	24	lb. ¾ c.
Moon knives.....	per cent. 30....	30....	24	per cent. 30
Mops.....	" 30....	30....	24	" 80
Morebad-swans, cotton.....	" 30....	25....	24	" 30
Morocco skins.....	doz. \$2.50....	20....	15	" 20
Morphine, acetate, sulphate, or crystals of.....	per cent. 25....	30....	24	oz. \$1.00
Mortars, brass, marble, or compo- sition.....	" 30....	30....	24	per cent. 30
Moss, Iceland.....	" 20....	20....	15	" 10
" for beds.....	" 10....	20....	15	" 20
Mosaics, real, not set.....	" 7....	10....	4	" 5
" " set.....	" 30....	30....	24	" 25
Mother of pearl buttons, with met- al eyes or ghanka,	" 30....	25....	19	" 30
" manufactured....	" 30....	30....	24	" 30
" shells.....	free,....	5....	4	free.
" studs.....	" 30....	30....	24	" 30
Moulds, button.....	" 25....	25....	19	" 30
Mouse traps, wood or wire.....	" 30....	30....	24	" 30
Muffs, of fur.....	" 35....	30....	24	" 30
Munjeet, (Indian Madder).....	free,....	5 ..	free,	free.
Muriate of barytes, tin, or strontian	" 20....	20....	15	" 20
" gold.....	" 20....	20....	24	" 20
Music, in sheets or bound.....	" 20....	10....	4	" 10
Musical instruments.....	" 30....	20....	15	" 20
" instrument strings of gut,	" 15....	20....	15	" 20
" " " part of metal.....	" 15....	20....	24	" 30
Mushrooms.....	" 30....	40....	30	" 10
Mushroom sauce.....	" 30....	30....	24	" 20
Musk.....	" 25....	30....	24	" 30
Musket barrels.....	" 30....	30....	24	" 30
" bayonets.....	" 30....	30....	24	" 30
" bullets.....	lb. 4 cts....	20....	15	" 30
" rods or stocks.....	per cent. 30....	30....	24	" 30
Muskets.....	stand \$1.50....	30....	24	" 30
Mustard, manufactured.....	per cent. 25....	20....	15	" 20
Mustard seed.....	" 5 ..	free, ..	free,	
Myrrh, gum, crude.....	" 15....	20....	15	free.
" refined.....	" 25....	20....	15	" 20
Myrobalan, a nut for dyes.....	free,....	20 ..	free,	free.

N.

	1842.	1846. per ct.	1857. per ct.	1861.
Nails, cut.....	lb. 3 cts.....	30....	24	lb. 1 ct.
“ wrought iron	“ 4 cts.....	30....	24	“ 2 cts.
“ rods.....	lb. 2½ cts.....	30....	24	ton \$20
Nankeens, (as cottons)	per cent. 30....	25....	24	(See Cotton.)
Nankeen shoes or slippers.....	“ 30....	30....	24	per cent. 30
Napkins, cotton.....	“ 30....	25....	24	“ 30
Napt, a manufacture of wool....	“ 40....	30....	24	lb. 12 cts. and p. c. 25
Narcotine.....	“ 20....	20....	24	per cent. 30
Natron.....	“ 10....	10....	8	free.
Needles, all kinds.....	“ 20....	20....	15	“ 20
“ crotchet.....	“ 25....	30....	24	“ 20
Nests, birds	“ 20....	20....	15	“ 10
Nets, fishing.....	lb. 7 cts.....	30....	24	lb. 6 cts.
Nickel	free,....	5....	4	free.
Nippers.....	per cent. 30....	30....	24	per cent. 30
Nitrate of barytes.....	“ 20....	20....	15	“ 20
“ iron.....	“ 20....	20....	15	“ 20
“ lead.....	“ 20....	20....	15	lb. 3 cts.
“ silver or lunar caustic.....	“ 20....	30....	24	per cent. 30
“ strontium	“ 20....	20....	15	“ 20
“ tin	“ 20....	20....	15	“ 20
Nitre mur, tin	“ 20....	20....	15	“ 10
Nitrous acid.....	“ 20....	20....	15	“ 10
Norfolk latches.....	“ 30....	30....	24	“ 30
Noyeau.....	gal. 60 cts.	100....	30	gal. 50 cts.
Nut-galls	free,....	5....	4	free.
Nutmega.....	lb. 30 cts.....	40....	4	“ 15
Nutria skins, undressed.....	per cent. 5....	10....	8	“ 5
Nuts for dyeing, crude.....	free,....	5 ..	free,	free.
“ all not specially mentioned.....	lb. 1 ct.....	30....	24	lb. 1 ct.
Nux vomica.....	free,....	10....	8	free.

O.

Oakum and junk.....	free, ..free, ..free,	free.
Oatmeal.....	per cent. 20....20.... 15	per cent. 10
Oats.....	bush. 10 cts....20.... 15	bush. 10 cts.
Ochre, dry.....	lb. 1 c....30.... 15	100 lbs. 35 cts.
“ in oil.....	“ 1½ c....30.... 24	“ \$1.35
Ochres, all, or ochery earths, when dry.....	lb. 1 ct....30.... 24	“ 35 cts.
Ochres, all, or ochery earths, in oil	“ 5 cts....30.... 24	“ \$1.35
Odors or perfumes.....	per cent. 25....30.... 24.	per cent. 30
Oil, all, used in painting.....	gal. 25 cts....20.... 15	gal. 20 cts.
“ animali.....	per cent. 20....20.... 15	per cent. 20
“ cakes.....	“ 20....30.... 15	“ 20

	1842.	1842. per ct.	1857. per ct.	1861.
Oil, castor.....	gal. 40 cts....	20	15	per cent. 20
" cloth	yd. 35 cts....	30	24	{ 50 c. or less, p. ct. 20 over 50 cts. p. ct. 30
" fish, and all production of American fisheries.....	free, ..free, ..free,			free.
" Harlem	per cent. 20....	30	24	per cent. 20
" hemp seed	gal. 25 cts....	20	15	gal. 20 cts.
" kerosene and other coal.....	per cent. 20....	20	24	" 10 cts.
" linseed.....	gal. 25 cts....	20	15	" 20 cts.
" olive, in casks.....	" 25 cts....	20	15	per cent. 10
" rape seed.....	" 25 cts....	20	15	gal. 20 cts.
" spermaceti, of foreign fishing	" 25 cts....	20	15	per cent. 20
" whale and other foreign fishing	" 15 cts....	20	15	" 20
Oil of cocoa nuts.....	per cent. 20....	10	4	" 10
" neats' foot.....	" 20....	20	15	" 20
" palm	free, ..10....	4		" 10
" palm bean.....	free, ..10....	4		" 10
Oils, volatile, essential or expressed	" 20....	30	24	" 20
" ricini, or palma Christi ...	" 20....	20	15	" 20
Old silver, fit only to be reman- ufactured	free, ..free, ..free,			free.
Olives, in oil.....	" 20....	30	24	" 30
Onions	" 20....	20	15	" 10
Opium.....	lb. 75 cts....	20	15	lb. \$1.00
" extract of.....	per cent. 25....	30	24	oz. \$1.00
Orange bitters.....	" 20....	30	24	per cent. 20
" crystals.....	" 20....	20	15	" 20
" flowers	" 20....	20	15	" 20
" flower water	" 20....	30	24	" 20
" issue peas.....	" 20....	30	24	" 30
" peel.....	" 20....	20	15	" 10
Oranges.....	" 20....	30	8	" 10
Ore, specimens of.....	free, ..20....	15		" 10
Organs.....	" 30....	20	15	" 20
Ornaments, gilt wood, gold paper, or for ladies' head dresses, silk	" 30....	30	24	" 30
Ornaments, not for head dresses, of metal.....	" 30....	30	24	" 20
Orpiment.....	" 15....	10	8	free.
Orris root.....	" 20....	20	15	free.
Osmers for baskets.....	" 20....	10	8	per cent. 20
Osnaburghs.....	" 25....	20	15	" 25@30
Ostrich plumes and feathers.....	" 25....	30	24	" 30
Oxymuriate of lime.....	" 20....	20	15	" 20
" or chlorate of potasse, or potash.....	" 20....	20	15	" 20
Oysters.....	" 20....	20	15	" 10

P.

	1842.	1846. per ct.	1857. per ct.	1861.
Pack thread.....	lb. 6 cts.....	30....	24	per cent 30
Padding, wool.....	per cent 40....	30....	24	lb. 12 cts. & per ct. 25
Paddy.....	" 20....	20....	15	lb. $\frac{1}{2}$ ct.
Pad screws.....	" 30....	30....	24	per cent 30
Paintings on canvas.....	" 30....	20 ..	free,	" 10
" glass.....	" 30....	30....	24	" 30
" porcelain.....	" 30....	20....	15	" 30
Paints, carmine.....	free,....	30....	24	" 30
" dry or ground in oil, not otherwise provided for..	" 20....	20....	15	" 20
" Spanish brown, dry.....	lb. 1 c.....	20....	15	100 lbs. 35 cts.
" " in oil....	lb. $1\frac{1}{2}$ cts.....	30....	24	" \$1.35
" terra umbra.....	per cent 20....	20....	15	per cent 30
" water colors.....	" 20....	80....	24	" 30
" white lead.....	lb. 4 cts.....	20....	15	lb. $1\frac{1}{2}$ cts.
Painters' colors.....	per cent 20....	20....	15	per cent 30
Palm leaf hats or baskets.....	" 25....	30....	24	" 30
" leaves, unmanufactured....	free,....	10 ..	free,	free.
Pannel saws.....	" 30....	30....	24	" 30
Pit saws.....	each \$1.00....	30....	24	9 in. wide or less ft. 12 $\frac{1}{2}$ c.
"	" \$1.00....	30....	24	over 9 in. wide, 20 cts.
Panilla grass.....	ton \$25....	25....	19	ton \$15
Paper, for screens or fireboards..	lb. 35 cts.....	20....	15	per cent 30
" hangings.....	per cent 35....	20....	15	" 30
" all other, and all manufac- tures of.....	" 30....	30....	24	" 30
" sheathing.....	" 30 ..	30....	24	" 10
" wadding.....	lb. 3 cts.....	30....	24	" 30
Parasols, silk.....	per cent 30....	30....	24	" 30
Parasol sticks or frames.....	" 30....	30....	24	" 30
Parchment.....	" 25....	30....	24	" 30
Paris white, dry.....	lb. 1 ct.....	20....	15	160 lbs. 35 cts.
" " ground.....	" 1 ct. ..	20....	15	" \$1.35
Parts of stills, of copper.....	per cent 30....	30....	24	per cent 30
Pasteboard.....	lb. $12\frac{1}{2}$ cts.....	30....	24	" 30
Paste almond.....	per cent 25....	30....	24	" 30
" giggers.....	" 25....	30....	24	" 30
" imitation of precious stones	" $7\frac{1}{2}$..	10....	8	" 10
" perfumed.....	" 25....	30....	24	" 30
" work that is set.....	" $7\frac{1}{2}$..	30....	24	" 30
Pastel, or wood.....	lb. 1 ct.....	10....	4	free.
Patent mordant.....	per cent 20....	20....	15	" 20
" yellow.....	" 20....	20....	15	" 10
Paving stones.....	" 25....	20....	15	" 10
" tiles.....	" 25....	20....	15	" 20
" " marble.....	" 25....	20....	15	" 30
Pearl, mother of.....	free,....	5....	4	free.

	1842.	1846.	1857.	1861.
	per cent.	per ct.	per ct.	
Pearls, all	per cent. 7....10....	4		per cent. 5
“ composition	“ 25....30....	24		“ 10
“ mock	“ 7....10....	8		“ 5
“ set.....	“ 25....30....	24		“ 25
Peanuts	lb. 1 ct....	20.... 15		lb. 1 ct.
Peas.....	per cent. 30....	20.... 15		per cent. 10
Pallitory root.....	“ 20....	20.... 15		“ 10
Pelts, salted.....	“ 5....	5.... 4		“ 5
Pencils, black lead, camels' hair, or red chalk.....	“ 25....	30.... 24		“ 30
“ slate	“ 25....	20.... 15		“ 30
Pencil cases, gold, silver, gilt, or plated.....	“ 25....	30.... 24		“ 30
Penknives	“ 30....	30.... 24		“ 30
Pens, metallic	“ 25....	30.... 24		“ 30
“ quill	“ 25....	20.... 15		“ 20
Pepper, black or white.....	lb. 5 cts....	20.... 15		lb. 2 cts.
“ Cayenne, Chili, or African, “ red pod.....	“ 10 cts....	30.... 4	{ ground unground	“ 4 cts. “ 3 cts. “ 20 cts.
“ 10 cts....	20.... 4			
Percussion caps.....	per cent. 30....	30.... 15		per cent. 20
Perfumed soap for shaving.....	“ 30....	30.... 24		“ 30
Perfumery vials and bottles.....	various,....	30.... 24		“ 30
Perfumes	“ 25....	30.... 24		“ 30
Perry	gal. 60 cts.	100.... 30		gal. 40 cts.
Personal and household effects, not merchandise of citizens of the U. S., dying abroad.....	free, ..free, ..free, free,....	15 ..free,		free.
Peruvian bark.....	free,....	15 ..free,		per cent. 10, or free.
Petershams, woollen cloth.....	per cent. 40....	30.... 24		lb. 12 cts. and p. ct. 25
Petticoats, ready made, cotton...	“ 50....	30.... 24		per cent. 30
Pewter, manufactures of, not enu- merated	“ 30....	30.... 24		“ 30
Pewter, old, fit only to be re-man- ufactured.....	free,....	5.... 4		lb. 1 ct.
Phosphate of lime.....	“ 20....	20.... 15		per cent. 30
“ of soda	“ 20....	20.... 15		“ 20
Phosphorus	“ 20....	20.... 15		“ 20
Phosphorus lights, in glass bot- tles, with paper cases.....	“ 20....	30.... 24		“ 30
Phosphuret of lime.....	“ 20....	20.... 15		“ 20
Piano-fortes.....	“ 30....	20.... 15		“ 20
Piano-forte ferrules.....	“ 30....	20.... 24		“ 20
Pickles.....	“ 30....	30.... 24		“ 30
Picrotoxine, an extract.....	“ 30....	30.... 24		“ 30
Pimento.....	lb. 5 cts,....	40.... 30		lb. 2 cts.
Pincers.....	per cent. 30....	30.... 24		per cent. 30
Pincushions, cotton.....	“ 30....	25.... 24		“ 30
“ silk	“ 30....	25.... 19		“ 30
“ wool	“ 25....	30.... 24		“ 30

	1842.	1846. per ct.	1857. per ct.	1861.
Pine apples	free, ...	20	8	free.
Pin or needle cases, all.....	per cent. 30	30	24	per cent. 30
Pink snucers	"	30	30	" 30
Pins	lb. 20 cts.	30	24	" 30
Pins, silver, iron, or pound.....	" 20 cts.	30	24	" 30
Piperine, extract.....	per cent. 30	30	24	" 30
Pipes, clay, smoking.....	"	30	30	100 lbs. 35 cts.
" watch, carriage, or cannon...	"	30	30	ton \$3.00
" wood.....	"	30	30	per cent. 30
Pistols	"	30	30	" 30
Pitch.....	"	25	20	" 20
" Burgundy.....	"	20	25	" 20
Plaids, cotton.....	"	30	25	(See Cotton.)
Plains.....	"	40	30	per cent. 30
Plaster busts, casts, statues.....	free, ...	30	free,	free.
" court, on silk or on cambric	"	30	30	" 30
" of Paris, unground.....	free, ..	free,	free,	free.
" " ground.....	"	20	20	" 10
" " calcined.....	"	20	20	" 20
" ornaments.....	"	30	30	" 30
Plane irons.....	"	30	30	" 30
Planes	"	30	30	" 30
Planks, wrought or rough.....	"	30	20	" 20
Plants.....	free, ..	free,	free,	free.
Plata pine.....	free, ..	free,	free,	free.
Plated wares of all kinds.....	"	30	30	" 30
Plate, silver.....	"	30	30	" 30
Platillas, linen.....	"	35	20	(See Linen.)
Platina, unmanufactured.....	free, ..	free,	free,	free.
" manufactures of.....	"	20	30	per cent. 30
" retorts.....	"	20	30	free.
Playing cards.....	pack 25 cts.	30	24	" 30
Pliers.....	per cent. 30	30	24	" 30
Ploughs	"	30	30	" 30
" plane.....	lb. 1 ct.	30	24	" 25
Plumbago.....	per cent. 20	20	15	" 10
Plumes, ornamental	"	25	30	" 30
Plums.....	"	25	30	lb. 1 ct.
Plush, cotton.....	"	30	25	per cent. 20
" hair.....	"	30	25	" 30
" hatters', of silk and cotton, cotton chief value.....	"	30	25	" 20
" mohair, or goats' hair	"	30	25	" 30
" or shag, worsted	"	30	25	" 30
" wool	"	30	30	lb. 12 cts. and p. ct. 25
Pocket books, leather.....	"	25	30	" 30
" " paper.....	"	20	30	" 30
" bottles, green glass	"	30	30	" 30
Poil de chevre, wool and cotton.	"	40	30	lb. 12 cts. and p. ct. 25
Poult, merino.....	"	40	30	per cent. 30

	1842.	1842. per ct.	1857. per ct.	1861.
Pole caps.....	per cent.	30....30....	24	per cent. 30
" carriage hooks.....	"	30....30....	24	" 30
" ferrules.....	"	30....30....	24	" 30
Polishing stones.....		free....10....	8	free.
Polished or scraped brass.....	"	30....30....	24	" 30
Polypodium.....	"	20....20....	15	" 20
Pomatum.....	"	30....30....	24	" 30
Pomegranates.....	"	20....20....	8	" 10
Pomegranate peel.....	"	30....20....	15	" 20
Poplins, stuff.....	"	20....25....	19	" 20
Poppy heads.....	"	20....20....	15	" 20
" oil.....	"	25....30....	24	" 20
" seed.....	"	25....free....	free.	free.
Porcelain.....	"	30....30....	24	" 30
" glass.....	"	30....30....	24	" 30
" slates.....	"	30....25....	19	" 30
Pork.....	lb. 2 cts.	20....	15	lb. 1 ct.
Porphyry.....	per cent.	30....30....	24	per cent. 30
Portable desks.....	"	30....30....	24	" 30
Porter, in bottles.....	gal. 20 cts.	30....	24	gal. 25 cts.
" otherwise.....	" 15 cts.	30....	24	" 15 cts.
Potasse, prussiate of.....	per cent.	20....20....	15	per cent. 15
Potassium.....	per cent.	20....20....	15	" 10
Potash, preparations of.....	"	20....20....	15	" 10
Potatoes.....	bush. 10 cts.	30....	24	bush. 10 cts.
Pots, black lead.....	per cent.	30....30....	24	per cent. 30
" blue.....	"	30....30....	24	" 30
" cast iron.....	lb. 1 ct.	30....	24	lb. 1 ct.
" melting, earthen.....	per cent.	30....30....	24	per cent. 20
Poultry, or game, prepared.....	"	25....40....	30	" 30
Pounce.....	"	20....20....	15	" 20
Pound ribbon.....	"	25....25....	19	" 30
Powder, black lead.....	"	25....20....	15	" 10
" blue.....	"	25....20....	15	" 10
" of brass.....	"	25....20....	15	" 20
" puffs.....	"	20....30....	24	" 30
" subtil, for the skin.....	"	20....30....	24	" 30
Powders and all pastes.....	"	25....30....	24	" 30
Precious stones, glass, imitation of, set.....	"	25....30....	24	" 25
" " of all kinds, not set.....	"	7....10....	4	" 5
" " other imitations of set.....	"	7....10....	8	" 25
" " set.....	"	25....30....	24	" 25
Prepared clay.....	"	30....20....	15	" 30
" vegetables, meats, poul- try and game.....	"	25....40....	30	" 30
Preserves in molasses and all others.....	"	25....40....	30	" 30
Pressing boards.....	"	30....30....	24	" 30

	1842.	1846. per ct.	1857. per ct.	1891.
Princess stuff, woolen.....	per cent. 40....	30....	24	lb. 13 cts. and p. ct. 25
Prints or engravings.....	"	20....	10....	8 per cent. 10
Prisms, cut glass.....	lb. 45 cts....	40....	30	" 30
Professional books of persons as- riving in the U. S.....	free, ..	free, ..	free,	free.
Protractors, ivory mounted.....	per cent. 30....	30....	24	" 30
Prunella.....	"	30....	25....	19 " 30
" for shoes, bootees, and buttons.....	"	5....	5....	4 " 10
Prunes.....	lb. 3 cts....	40....	8	lb. 2 cts.
Prussian blue.....	per cent. 20....	20....	4	per cent. 19
Pucheri.....	"	20....	20....	15 " 20
Pullies, iron, brass, copper or wood	"	30....	30....	24 " 30
Pumice.....	free, ..	10....	8	free.
Pumpkins.....	free, ..	30....	15	" 10
Pumps, stomach.....	per cent. 30....	30....	24	" 30
Punches, shoe.....	"	20....	30....	24 " 30
Punjamas, Madras, cottons.....	"	30....	25....	24 " 30
Purple, brown.....	"	25....	20....	15 " 20
" in liquor.....	"	25....	20....	15 " 20
Putty.....	lb. 1½ cts....	20....	15	lb. 1 c.

Q.

Quadrants and sextants.....	per cent. 30....	30....	24	per cent. 30
Quadrant frames.....	"	30....	30....	24 " 30
Quality binding, worsted.....	"	30....	25....	19 " 30
Quassia wood.....	"	20....	20....	15 free.
Quilla bark.....	free, ..	15....	12	free.
Quill baskets.....	"	25....	20....	15 " 30
Quills.....	"	15....	20....	15 " 20
Quiltings, or bed quilts, cotton..	"	30....	25....	24 " 30
Quicksilver.....	"	5....	20....	15 " 10
Quinine.....	"	20....	20....	15 " 30
" sulphate of.....	oz. 40 cts....	20....	15	" 20

R.

Radix, or angelica root.....	per cent. 20....	20....	15	per cent. 20
Rag stones.....	"	20....	30....	15 " 20
Rags, of any kind, except wool..	lb. ½ ct....	5 ..	free,	free.
Raisins, boxes or jars.....	lb. 3 cts....	40....	8	lb. 2 cts.
" other.....	"	2 cts....	40....	8 " 1 ct.
Rakes, iron, steel or wood.....	per cent. 30....	30....	24	per cent. 30
Rancon.....	free, ..	10....	4	" 10
Rape of grapes.....	"	20....	30....	15 " 20
" seed.....	"	20....	10....	8 bush. 10 cts.

	1842.	1842.	1867.	1861.
		per ct.	per ct.	
Rappers, brass or iron	per cent.	30....30....	24	per cent. 30
Rasps.....	"	30....30....	24	" 20
Rass, cornu cervi.....	"	20....20....	15	" 20
Ratfa	gal. 60 cts.	100....	30	per gal. 50 cts.
Rattans, unmanufactured.....	free,	10 ..	free,	free,
" manufactured	per cent.	20....20....	15	per cent. 20
Rattles, wood, ivory, coral, or with bells.....	"	30....30....	24	" 20
Ravens duck, hemp or flax.....	sq. yd. 7 cts.	20....	15	30 cts. or less p.ct. 25
" " "	" 7 cts.	20....	15	over 30 cts. p.ct. 20
Razors.....	per cent.	30....30....	24	per cent. 30
Razor cases.....	"	30....30....	24	" 30
" strops, wood.....	"	30....30....	24	" 30
Ready-made clothing, wool.....	"	50....30....	24	lb. 12 cts. & per ct. 25
" " other.....	"	50....30....	24	per cent. 30
Reaping-hooks, iron or steel.....	"	30....30....	24	" 30
Red chromate of potash.....	"	25 ..30....	15	lb. 3 cts.
" lead, ground in oil.....	lb. 4 cts.	20....	15	" 1½ cts.
" precipitate.....	per cent.	25....20....	15	per cent. 20
" Venetian, dry	"	25....20....	15	100 lbs. 35 cts.
" " ground in oil.....	"	25....20....	15	" \$1.35
" wood and red sanders' wood.....	free,	5 ..	free,	" 10
" wool, or fur for hatters.....	free,	10....	8	" 10
Reeds, unmanufactured.....	free,	10 ..	free,	free.
" manufactured.....	"	20....30....	24	" 30
" weavers'.....	"	30 ..30....	24	" 30
Reeves' colors.....	"	30....30....	24	" 30
Regulus of antimony.....	"	20....20....	8	" 10
Reindeer skins, dressed	various.	20....	15	" 30
" " undressed	"	5....	4	" 5
" " tanned.....	"	20....	15	" 20
" tongues.....	"	20....	15	" 30
Reps, natural silk and cotton....	per cent.	30....25....	19	" 30
" silk.....	lb. \$2.50.	25....	19	" 30
Resin.....	per cent.	15....20....	8	" 20
" of jalap.....	"	15....20....	8	" 30
" nux vomica.....	"	15....20....	8	free.
Rest pins.....	"	30....30....	24	" 30
Rhodum.....	"	20....20....	15	" 10
Rhubarb.....	"	20....20....	15	" 10
Ribbon wire, or canetille, if cov- ered with cotton thread	lb. 8 cts.	30....	24	lb. 2 cts. and p. ct. 15
Ribbon wire, covered with silk ..	" 12 cts.	30....	24	" 2 cts. " " 15
Rice	per cent.	20....20....	15	lb. 1 ct.
Rifles.....	each \$2.50.	30....	24	per cent. 30
Rigotine, a kind of woollen cloth,	per cent.	40....30....	24	lb. 12 cts. & per ct. 25
Rings, all metal.....	"	30....30....	24	per cent. 30
Rivets, brass, iron, and steel....	"	30....30....	24	" 30
Rochelle salts.....	"	20....20....	15	" 30
Rock moss.....	"	20....20....	15	" 30

	1842.	1846. per ct.	1857. per ct.	1861.
Rods and eyes, for stairs	per cent. 30....	30....	24	per cent. 20
Rods, wood, composition, case- ment, slit or rolled steel	"	30....	30....	" 20
Roller buckles, as saddlery	"	20		
Rolls, brown or white linen	"	25....	20....	15 { 30 c. or less, per ct. 25 over 30 c. " 30
Romals, cotton goods	"	30....	35....	24 (See Cottons.)
Roman cement	"	20....	20....	15 per cent. 20
" vitriol	"	20....	20....	15 " 20
Rope, diar or coiar	lb. 4½ cta....	25....	19	lb. 2 cta.
" made of grass or bark	" 4½ cta....	25....	19	" 2 cta.
" made of hides cut in strips,	per cent. 20....	20....	15	per cent. 20
" of cordage of cocoa nut shells	lb. 4½ cta....	25....	19	lb. 3 cta.
Beets, all not otherwise enumer- ated		free,...	free,...	free.
" arrow	per cent. 20....	20....	15	per cent. 10
" madder		free,...	5....	free.
" medicinal, other, crude...	"	20....	20....	15 " 20
Bene leaves	"	25....	20....	15 " 20
" water	"	25....	30....	24 " 20
Bosin	"	15....	20....	8 " 20
Bosolio, cordial	gal. 60 cta....	100....	30	gal. 50 cta.
Botten stone		free,...	10....	8 free.
Breens, linen	per cent. 25....	20....	15	(See Linen.)
Bouge	"	20....	30....	24 per cent. 30
Rubies	"	7....	10....	4 " 5
" set	"	25....	30....	24 " 25
Rubrum, bark acer	"	20....	20....	15 " 20
Rugs, for bed coverings, cotton..	"	30....	25....	24 " 30
" all other	"	40....	30....	24 " 30
Rules, all	"	20....	30....	24 " 30
Rum	gal. 60@90 c....	100....	30	gal. 40 cta.
" bay, or bay water	per cent. 25....	30....	24	" 25 cta.
" cherry	gal. 60 cta....	100....	30	gal. 50 cta.
Russia crash, hemp	per cent. 20....	20....	15	
" duck, diaper, linen, sheet- ings, and other of flax..	"	20....	20....	15 30 c. or less, p. ct. 25
" do do	"	20....	20....	15 over 30 cta, " 30
Rust of iron	"	20....	20....	15 " 20
Rye	bush. 15 cta....	20....	15	bush. 15 cta.
" flour	per cent. 20....	20....	15	" 20

S.

Sabres	per cent. 30....	30....	24	per cent. 30
Saccharum saturni, S. of L.	"	20....	20....	15 " 20
Sacking, linen	"	20....	20....	15 " 30
Saddle hooks	"	30....	30....	24 " 30

	1842.	1842. per ct.	1857. per ct.	1861.
Saddle trees.....	per cent. 30	30	24	per cent. 30
Saddlery, all not otherwise speci-				
fied.....	"	30	30	24
" silver plated, brass, or				
steel.....	"	30	30	24
" tinned, japanned, or				
common.....	"	30	20	15
Saddles.....	"	30	30	24
Safflower.....	free,	5	free,	free.
Saffron.....	free,	20	15	" 10
" cake.....	"	20	20	15
Sago.....	"	20	20	15
Sail duck.....	sq. yd. 7 cts.	20	15	per cent. 25
Salacina, med. prep.....	per cent. 30	30	24	" 30
Sal ammoniac.....	"	20	10	8
" diuretic.....	"	20	20	15
" succinic.....	"	20	20	15
Salempores, cottons.....	"	30	25	24
Salep.....	"	20	20	15
Salmon, preserved.....	bbl. \$2.00	30	24	" 30
" pickled.....	per cent. 20	40	30	bbl. \$3.00
Salt, bulk.....	bush. 8 cts.	20	15	bush. 4 cts.
" otherwise.....	" 8 cts.	20	15	" 6 cts.
Salted skins, roans or pelts....	per cent. 5	5	4	per cent. 5
Saltpetre, partially refined.....	lb. $\frac{1}{2}$ ct.	10	8	" 10
" refined.....	" 2 cts.	10	8	" 10
" or nitrate of potash,				
crude.....	free,	5	4	free.
Salts, chemical, all.....	per cent. 20	20	15	" 20
Sandarach, refined.....	"	25	20	15
Sand stones.....	"	20	20	15
Sannas, cotton.....	"	20	25	24
Sarcocolla, crude.....	"	20	20	8
Sardines, in salt.....	"	20	20	15
" and all fish in oil.....	"	20	20	30
Sarsaparilla.....	free,	20	15	" 10
Sarunets, cotton.....	"	30	25	24
" silk.....	lb. \$2.50	25	19	per cent. 30
Sashes, silk.....	" \$2.50	30	24	" 30
Sash fasteners.....	per cent. 30	30	24	" 30
Sassafras.....	"	20	20	15
Satin, Denmark, worsted.....	"	20	25	19
" gauze.....	"	20	25	19
" silk.....	lb. \$2.50	25	19	" 30
Saucepans, metal.....	per cent. 30	30	24	" 30
Sauces, all kinds.....	"	20	30	24
Sausages, (if not Bologna).....	"	25	40	30
Sawns, cottons.....	"	30	25	24
Saws, cross cut.....	"	30	30	24

	1842.	1842.	1857.	1861.
	per cent.	per ct.	per ct.	
Saws, mill-pit and drag	30....30....	24	wide 9 in. or less ft. 12 1/2	
" " " "	" 30....30....	24	over 9 in. wide ft. 20 c.	
Saw sets	" 30....30....	24	per cent. 30	
Scagliola tables or slabs	" 30....40....	30	" 30	
Scale beams	" 30....30....	24	" 30	
Scales	" 30....30....	24	" 30	
Scammoniate, med. gum	" 20....30....	15	" 20	
Scantling	" 20....20....	15	" 20	
" and sawed timber, or un-				
wrought	" 20....20....	15	" 30	
Scarfs, silk or cotton	" 30....30....	24	" 30	
" wool	" 40....20....	24	lb. 12 cts. and p. c. 25	
Scalls, or squills	" 20....20....	15	per cent. 30	
Scissors	" 30....30....	24	" 30	
Scoop nets	lb. 7 cts.	24	lb. 6 cts.	
Scotch braces	per cent. 30....30....	24	per cent. 30	
Sorapars	" 30....30....	24	" 30	
Sea weed, and all other vegetable				
substances used for beds or				
mattresses	" 20....30....	15	" 20	
Seed lac	" 10.... 5....	4	free.	
Seeds, garden	free, ..free, .. free,		free.	
" all others not specified....	free, ..free, .. free,		per cent. 10	
Seines	lb. 7 cts.	24	lb. 6 cts.	
Segars	lb. 40 cts.	30	\$5 or less M. lb. 20 cts.	
"	" 40 cts.	30	\$5@10 M. lb. 40 cts.	
"	" 40 cts.	30	over \$10 M. 60c. & p. c. 10	
" paper	" 15 cts.	30	per cent. 30	
Seltzer water	per cent. 20....30....	24	" 20	
Seneca, or radix root	" 20....20....	15	free.	
Senna	" 20....20....	15	" 10	
Sepia	" 20....20....	15	" 10	
Serge, woolen	" 40....30....	24	lb. 12 cts. and p. c. 25	
Sextants	" 30....30....	24	per cent. 30	
Shades, lace, sewed	lb. \$2.50	24	" 30	
Shaddocks	free,	8	" 10	
Shaving soap	per cent. 30....30....	24	" 30	
Shawls, wool	" 40....30....	24	lb. 12 cts. and p. c. 25	
" other shawls	" 30....30....	24	per cent. 30	
Shears	" 20....30....	24	" 30	
Sheathing metal, patent, composed				
in part of copper	free, ..free, .. free,		" 2 cts.	
Sheathing paper	lb. 15 cts.	15	per cent. 10	
Sheets, willow	" 30....30....	24	" 30	
Sheetings, linen, hemp or Russia,				
brown or white	" 20....20....	15	" 25	
Shellac	free,	4	free.	
Shell, baskets	" 25....30....	24	" 30	
" boxes, not otherwise enu-				
merated	" 25....30....	24	" 30	

	1842.	1846.	1857.	1861.
		per ct.	per ct.	
Shell, gold, for painting.....	per cent. 20	30	24	per cent. 20
“ silver, for painting.....	“	20	30	“ 20
“ turtle or tortoise	“	5	5	free.
Shells, all other.....	“	20	5	free.
Shingle and stave bolts.....	free,	free,	free,	free.
Shingles	“	20	20	“ 30
Shirtings, cotton bleached.....	“	30	25	24 (See Cotton.)
“ unbleached.....	“	30	25	19 “
“ linen	“	25	20	15 per cent. 25
Shirts, silk.....	lb. \$2.50	30	24	“ 30
“ woollen or worsted.....	per cent. 40	25	19	lb. 12 cts. and p. ct. 25
“ all other similar manufac- tures made on frame.....	“	30	30	24 per cent. 30
Shoe binding, silk.....	“	30	25	19 “ 30
“ “ woollen.....	“	30	30	24 “ 30
“ thread.....	“	30	20	15 “ 30
Shoes or slippers for children....	pair 15 cts.	30	24	“ 30
“ “ for grown per- sons, of silk...	“ 30 cts.	30	24	“ 30
“ “ of leather, for men.....	“ 30 cts.	30	24	“ 30
“ “ of prunella, stuff, or other materials, except silk, for women.....	“ 30 cts.	30	24	“ 30
Shoes, i. e. double-soled pumps and welts, women's leather.....	“ 25 cts.	30	24	“ 30
Shot bags and belts	per cent. 25	30	24	“ 30
Shovels.....	“	30	30	24 “ 30
Shrubs	free,	free,	free,	free.
Shute, imperial.....	“	20	20	15 “ 30
Shuttlecocks and battledores....	“	30	30	24 “ 30
Sickles, iron, steel.....	“	30	30	24 “ 30
Side arms.....	“	30	30	24 “ 30
Sieves, lawn, cypress, wire or hair	“	30	30	24 “ 30
Silk and cotton vesting	per cent. 30	25	19	“ 30
“ and worsted valencias, toile- nets or crape de Lyons ..	lb. \$2.50	25	19	“ 30
“ and worsted shawls, hemmed	per cent. 30	30	24	“ 30
“ “ manufactures of	“	30	25	19 “ 30
“ aprons, collars, cuffs, chemi- settes, turbans, mantillas, and pellerines.....	lb. \$2.50	30	24	“ 30
“ bobbin or braids.....	per cent. 30	25	19	“ 30
“ caps, if entirely of silk.....	lb. \$2.50	30	24	“ 30
“ cords	“ \$2.50	25	19	“ 30
“ curls.....	“ \$2.50	30	24	“ 30
“ floss and other similar, puri- fied from the gum.....	per cent. 25	25	19	“ 20
“ frizettes.....	“	30	30	24 “ 30
“ garters, with wire and clasps	“	30	30	24 “ 30

	1842.	1846. per ct.	1857. per ct.	1861.
Silk, gloves.....	lb. \$2.50....	30....	24	per cent. 30
" handkerchiefs, not sewed...	" \$2.50....	25....	19	" 30
" hat bands.....	" \$2.50....	25....	19	" 30
" hats or bonnets for women..	each \$1....	30....	24	" 30
" hose.....	per cent. 40....	30....	24	" 30
" " sewed.....	" 40....	30....	24	" 30
" lace.....	lb. \$2.50....	25....	19	" 30
" manufactures with gold or silver, or other metal....	per cent. 30....	30....	24	" 30
" mitts.....	lb. \$2.50....	30....	24	" 30
" " sewed.....	" \$2.50....	30....	24	" 30
" not more advanced in man- ufacture than singles, or tram.....	lb. 50 cts....	15....	12	" 15
" ornaments, oil cloth, suspend- ers, stocks, stockings, twist.....	per cent. 30....	30....	24	" 30
" pongees, white.....	lb. \$2.50....	25....	19	" 30
" raw.....	" 50 cts....	15....	24	free.
" sewing, all.....	" \$2....	30....	24	" 30
" " raw.....	" 50 cts....	15....	free,	" 30
" tassels.....	" \$2.50....	25....	19	" 30
" watch chains or ribbons....	" \$2.50....	25....	19	" 30
" webbing.....	per cent. 30....	25....	19	" 30
" velvets, \$3. per yard or less,	lb. \$2.50....	25....	19	" 25
" " over \$3. per yard..	" \$2.50....	25....	19	" 30
" all other articles.....	" 30....	30....	24	" 30
Silks, at \$1. per yard or less....	lb. \$2.50....	25....	19	" 30
" over \$1. per yard.....	" \$2.50....	25....	19	" 30
Silver, all manufactures of, not otherwise specified....	" 30....	30....	24	" 30
" bullion and coin.....	free, ..	free, ..	free,	free.
" German, in sheets.....	" 30....	30....	24	" 30
" " manufactures of,	" 30....	30....	24	" 30
" plated metal, in sheets or other form.....	" 30....	30....	24	" 30
Silvered wire.....	" 30....	30....	24	" 30
Syrup of sugar cane.....	lb. 2½ cts....	30....	24	lb. ¾ ct.
Sisal grass.....	ton \$25....	25....	19	ton \$10
Sithes.....	per cent. 30....	30....	24	per cent. 30
Skates.....	" 30....	30....	24	20 c. or less, pair 6 c.
"	" 30....	30....	24	over 20 cts. p. ct. 30
Skeletons.....	" 30....	20....	15	per cent. 30
Skins, calf and seal, tanned and dressed.....	doz. \$5.00....	20....	15	" 20
" fish, for saddlers, &c.....	" 20....	20....	15	" 20
" glazed, as patent leather..	" 35....	20....	19	" 30
" goat and sheep, tanned and not dressed.....	doz. \$1.00....	30....	15	" 20

	1842.	1846. per ct.	1857. per ct.	1861.
Skins, goat or morocco, tanned and dressed.....	doz. \$2.50....	20....	15	per cent. 20
“ kid and lamb, tanned and not dressed.....	“ 75 cts....	20....	15	“ 20
“ kid, fanned and dressed..	“ \$1.00....	20....	15	“ 20
“ of all kinds in the hair, dried, raw, or unmanufactured,	per cent. 5....	5....	4	“ 5
“ pickled, in casks.....	“ 20....	5....	4	“ 5
“ sheep, tanned or dressed..	doz. \$1.00....	20....	15	“ 20
“ “ with wool.....	“ \$1.00....	20....	15	“ 15
“ tanned and dressed, other- wise than in colors, viz.: fawn, kid, & lamb, known as chamois,	“ \$1.00....	20....	15	“ 20
Skins, white, for druggists.....	per cent. 20....	20....	15	“ 20
“ with wool upon them....	“ 20....	20....	15	“ 15
Skivers, pickled.....	“ 20....	5....	4	“ 5
“ tanned.....	doz. \$2.00....	20....	15	“ 20
Slates of all kinds.....	per cent. 25....	25....	19	“ 30
Sledges.....	lb. 2½ cts....	30....	24	lb. 2 cts.
Slick stones.....	per cent. 20....	20....	15	per cent. 20
Smalts.....	“ 20....	20....	15	free.
Snails.....	“ 20....	20....	15	“ 20
Snake-root.....	“ 20....	20....	15	free.
Snaps, a clasp or ketch.....	“ 30....	30....	24	“ 30
Snuff.....	lb. 12 cts....	40....	30	lb. 10 cts.
Snuffers.....	per cent. 80....	30....	24	per cent. 30
Snuffer trays.....	“ 30....	30....	24	“ 30
Soap, all.....	lb. 4 cts....	30....	24	“ 30
“ stocks and stuffs.....	per cent. 10....	10....	8	“ 10
Soda, ash.....	“ 5....	10....	4	free.
“ preparations or manufac- tures of.....	“ 20....	20....	15	“ 20
Soie blanche, Chenille.....	“ 20....	25....	19	“ 30
Solanine, med. prep.....	“ 20....	20....	24	“ 30
Soles, felt or cork.....	“ 30....	30....	24	“ 30
Sooty romals, cotton.....	“ 30....	25....	24	“ 30
Souvenirs.....	“ 30....	30....	24	“ 30
Soy.....	“ 30....	30....	24	“ 20
Spars.....	“ 30....	20....	15	“ 20
Spartaria.....	“ 30....	30....	24	“ 30
Spa, or Spaware.....	“ 30....	40....	30	“ 30
Spartateen, or coral.....	“ 20....	20....	15	“ 30
Spatulas.....	“ 30....	30....	24	“ 30
Specimens, anatomical prepara- tions.....	“ 30....	30....	24	“ 30
Spectacle cases, all.....	“ 30....	30....	24	“ 30
“ glasses, not set.....	gross \$2....	30....	24	“ 30
“ “ pebble, not set,	“ \$2....	30....	24	“ 30
Spectacles, all.....	per cent. 30....	30....	24	“ 30
Spelter, in pigs, bars, or plates..	“ 20	10	4	lb. 1 ct.

	1842.	1843.	1857.	1861.
	per ct.	per ct.	per ct.	
Spelter, in sheets.....	per cent. 20....	15....	12	lb. 1½ cts.
“ manufactures of.....	“ 20....	30....	24	per cent. 30
Spermaceti oil, of foreign fisheries,	gal. 25 cts....	20....	15	“ 20
Spider net, considered as cotton				
cloth.....	per cent. 30....	28....	24	“ 30
Spirits, brandy.....	gal. 60 cts....	100....	30	1st proof, gal. \$1.00
“ grain.....	“ 60 cts....	100....	30	“ “ 40 cts.
“ other materials.....	“ 60 cts....	100....	30	“ “ 40 cts.
“ yellow.....	“ 60 cts....	20....	15	per cent. 30
Spokes.....	per cent. 30....	30....	24	“ 30
Spokeshaves.....	“ 30....	30....	24	“ 30
Sponges.....	“ 20....	20....	8	“ 10
Spoons, all.....	“ 30....	30....	24	“ 30
Spunk.....	“ 20....	20....	15	“ 10
Spurs, all.....	“ 30....	30....	24	“ 30
Springs, for wigs.....	“ 30....	30....	24	“ 30
Spy-glasses.....	“ 30....	30....	24	“ 30
Squares, all.....	“ 30....	30....	24	“ 30
Starch.....	lb. 2 cts....	20....	15	“ 20
Stars of gold, fine and half fine..	per cent. 30....	30....	24	“ 30
St. Ignatius' beans.....	“ 20....	20....	15	“ 20
Statues and specimens of statuary	free, .. free, .. free,			“ 10
Staves, all.....	“ 20....	20....	15	free and p. ct. 20
Stavesacre.....	“ 20....	20....	15	per cent. 20
Steel in ingots, bars, sheets or wire				
over ½ in. diam., valued 7 cts.				
or less.....	cwt. \$2.50....	20....	15	lb. 1½ cts.
Do. do. valued 7@11 cts..	“ \$2.50....	20....	15	“ 2 cts.
Steel, any form not provided for..	“ \$2.50 ..	20....	15	per cent. 20
“ wire, No. 16@½ in. in diam.	per cent. 30....	20....	15	lb. 2 cts. and p. ct. 15
“ “ less than No. 16....	“ 30....	20....	15	“ 2½ “ “ 15
“ all manufactures of.....	“ 30....	30....	24	per cent. 30
Stereotype plates.....	“ 25....	20....	15	“ 20
Stiffeners for cravats.....	“ 30....	30....	24	“ 30
Still worms.....	“ 30....	30....	24	“ 30
“ bottoms.....	“ 30....	30....	24	“ 30
Stockinets.....	“ 40....	30....	24	“ 30
Stomach pumps.....	“ 30....	30....	24	“ 30
Stone, Armenian.....	“ 20....	20....	15	“ 20
“ ware.....	“ 30....	30....	24	“ 20
“ “ whether gilt, painted,				
printed or glazed.....	“ 20....	30....	24	“ 25
Stones, Bristol.....	“ 20....	20....	15	“ 20
“ caustic.....	“ 20....	20....	15	“ 20
“ mill, fit for use.....	“ 20....	20....	15	“ 20
“ not merchantable, ballast	“ 20....	20....	15	“ 20
“ oil.....	“ 20....	20....	15	“ 20
Storax, balsam.....	“ 30....	30....	24	“ 30
Straw baskets.....	“ 35....	30....	24	“ 30
“ carpets and carpeting....	“ 25....	25....	24	“ 30

	1842.	1846. per ct.	1857. per ct.	1861. per cent.
Straw, for hats, in natural state... per cent.	30	20	15	20
Stretchers for umbrellas and parasols.....	"	30	30	30
Strings, bow, if gut.....	"	15	20	20
" hatters', if gut.....	"	15	20	20
" of musical instruments, if gut.....	"	15	20	20
Strontian.....	"	20	20	20
Strychnine.....	"	20	30	30
Studs, all.....	"	30	30	30
Stuff, princettas.....	"	30	25	30
" goods, all kinds of worsted.....	"	30	25	30
Succory, ground.....	"	20	20	20
Sugar, raw..... lb.	2½ cts.	30	24	¼ ct.
" refined, loaf, lump, crushed, pulverized.....	"	6 cts.	30	2 cts.
" refined, tinctured or colored.....	"	6 cts.	30	4 cts.
" syrup, concentrated molasses and melado.....	"	2½ cts.	30	¼ c.
" white or clayed.....	"	2½ cts.	30	¼ c.
" of lead.....	"	4 cts.	20	per cent. 20
" moulds, hooped or not.... per cent.	30	30	24	30
Sulphate of ammonia.....	"	30	20	10
" of quinine, of rhubarb, of zinc, of magnesia, or of iron.... oz.	40 cts.	20	15	¼ ct.
Sulph. mur. tin..... per cent.	20	20	15	10
Sulphur, flor.....	free	20	15	20
Sulphuric ether.....	"	20	15	20
Sumac.....	free	5	4	free
Surgeons' instruments, all.....	"	30	30	30
Surplice pins.....	"	30	30	30
Suspender ends.....	"	35	30	30
Suspenders, all.....	"	35	30	30
Swans, down of.....	"	25	25	20
Swansdown, woollen.....	"	40	30	lb. 12 cts. and p. ct. 25
Sweetmeats or cornfits, all.....	"	25	40	per cent. 30
Sword knots, gold and silver, fine and half fine....	"	30	30	30
" lace.....	"	30	30	30
" silk or worsted....	"	30	25	30

T.

Table tops, scagliola..... per cent.	30	40	30	per cent. 30
Tailors' chalk.....	"	20	20	free.
Talc, mineral.....	"	20	20	10
Tallow..... lb.	1 ct.	10	8	1 ct.
" candles..... lb.	4 cts.	20	15	2 cts.

	1842.	1846.	1857.	1861.
	per cent.	per ct.	per ct.	per cent.
Tamarinds	25....20....	8		per cent. 19
“ preserved.....	“ 25....40....	30		“ 30
Tamboreens.....	“ 25....20....	15		“ 20
Tannin, medicinal.....	“ 30....30....	24		“ 30
Tapers, paper, with cotton wick.	“ 35....30....	24		“ 30
“ stearine.....	“ 30....20....	15		lb. 4 cts.
“ spermaceti or wax.....	“ 30....20....	15		“ 8 cts.
Tapioca.....	“ 25....20....	15		per cent. 10
Tar, Barbadoes, crude.....	“ 15....20....	15		“ 20
“ coal.....	“ 15....20....	15		“ 20
Tares	“ 25....20....	15		“ 20
Taraulings.....	“ 20....20....	15		“ 20
Tartrate of antimony, or tart.				
emetic.....	“ 20....20....	15		“ 20
Tasters, cheese	“ 30....30....	24		“ 20
Teas, all kinds, from beyond Cape				
of Good Hope.....	free,.. free,.. free,			free.
Teas, other.....	“ 20....20....	15	lb. 4 cts. and per ct. 10	
Teazles	“ 20....20....	15	per cent. 10	
Teeth, all other	free,... 5....	4	“ 10	
Telescopes	“ 20....30....	24	“ 30	
Terraglia, a kind of coral.....	“ 20....20....	15	“ 20	
Terra-japonica	“ 15....10 .. free,		free.	
“ de sienna, in oil...	“ 25 ....30....	24	“ 30	
Terra umbra and sienna, dry....	“ 20....20....	15	“ 10	
Teutenague, in sheets.....	free,...15....	12	lb. 1½ cts.	
“ boxes	free,...30....	24	per cent. 30	
“ unmanufactured....	free,... 5....	4	lb. 1 ct.	
Theriacque.....	“ 20....20....	15	per cent. 20	
Thibet, cashmere of.....	“ 20....25....	19	“ 20	
“ shawls, real or goats' hair,	“ 40....30....	24	“ 30	
“ “ of wool	“ 40....30....	24	lb. 12 cts. and p. ct. 25	
“ “ body cotton.....	“ 30....30....	24	per cent. 30	
Thimbles, all	“ 20....30....	24	“ 30	
Thor, marine	“ 20....20....	15	“ 20	
Thread, escutcheons.....	“ 30....30....	24	“ 30	
“ pack	lb. 6 cts....30....	24	“ 30	
Thridace.....	per cent. 20....20....	15	“ 20	
Ticklenbergs	“ 25....20....	15	“ 30	
Ticks, cotton	“ 30 ....25....	24	“ 30	
Tiles, marble.....	“ 30....30....	24	“ 30	
“ paving and roofing.....	“ 25....20....	15	“ 30	
“ encaustic.....	“ 25....20....	15	“ 20	
Timber, hewn or sawed.....	“ 20....20....	15	“ 20	
Time pieces.....	“ 25....30....	24	“ 30	
Tin, all manufactures of.....	“ 30....30....	24	“ 30	
“ banca	lb. 1 ct.... 5... free,		free.	
“ block	“ 1 ct.... 5 .. free,		free.	
“ boxes	per cent. 30....30....	24	“ 30	
“ crystals of	“ 30....20....	15	“ 20	

	1842.	1846.	1857.	1861.
		per ct.	per ct.	
Tin, foil	lb. 2½ cts....	15....	12....	per cent. 10
“ granulated	“ 2½ cts....	20....	15....	“ 20
“ grain	per cent. 20....	20....	15....	“ 20
“ in bars	lb. 1 ct....	5....	free,	free.
“ in pigs	“ 1 ct....	5....	free,	free.
“ in plates	lb. 2½ cts....	15....	8....	“ 10
“ “ galvanized	“ 2½ cts....	15....	8....	“ 10
“ in sheets	“ 2½ cts....	15....	8....	“ 10
“ liquor	per cent. 20....	20....	15....	“ 20
“ muriate of	“ 20....	20....	15....	“ 10
“ oxide of	“ 20....	20....	15....	“ 20
“ tagger	lb. 2½ cts....	15....	8....	“ 10
Tinctures, bark, and other medicinal	per cent. 30....	30....	24....	“ 30
“ odoriferous	“ 25....	30....	24....	“ 30
Tippets, if classed as millinery	“ 30....	30....	24....	“ 30
Tips and runners for parasols and umbrellas, metal	“ 30....	30....	24....	“ 30
Tobacco, manufactured	lb. 10 cts....	40....	30....	“ 30
“ leaves, or unmanufactured	per cent. 20....	30....	24....	“ 25
Toiletets	“ 30....	30....	24....	“ 30
Toilet glasses	“ 30....	30....	24....	“ 30
Tolu, balsam of	“ 20....	30....	24....	“ 30
Tongues, neats, smoked	“ 20....	20....	15....	“ 30
“ reindeer	“ 20....	20....	15....	“ 30
“ sounds	“ 20....	20....	15....	“ 30
Tonqua beans	“ 20....	20....	15....	“ 20
Tools and implements of trade in use by persons arriving in the United States	free,..	free,..	free,	free.
Tooth brushes or powders	“ 30....	30....	24....	“ 30
“ picks, all	“ 30....	30....	24....	“ 30
Topaz, real	“ 7....	10....	4....	“ 5
Touch stones	“ 20....	20....	15....	“ 20
Tow, flax	“ 20....	20....	15....	ton \$5
“ hemp	“ 20....	20....	15....	“ \$10
Toys, of every description	“ 30....	30....	24....	per cent. 30
Trays and waiters, all	“ 30....	30....	24....	“ 30
Treacle, molasses	lb. 4½ mills....	30....	24....	gal. 2 cts.
Tresses, lace	lb. \$2.50....	30....	24....	per cent. 30
Trees	free,..	free,..	free,	free.
Truffles	per cent. 30....	40....	30....	“ 30
Trusses	“ 30....	30....	24....	“ 30
Tubes, cast	“ 30....	30....	24....	lb. ½ ct.
“ wrought	“ 30....	30....	24....	“ 2 cts.
Tug buckles, as saddlery	“ 30....	30....	24....	per cent. 30
Turmeric	free,..	5....	4....	free.
Turpentine, spirits of	gal. 10 cts....	20....	15....	gal. 10 cts. or p. ct. 20
Turquoises	per cent. 7....	10....	4....	per cent. 5

	1842.	1842. per ct.	1857. per ct.	1861.
Turtle, green.....	per cent. 20....	20....	15	per cent. 10
Tweezers, all.....	" 30....	30....	24	" 30
Twine.....	lb. 6 cts....	30....	24	" 30
Types, metal.....	per cent. 25....	20....	15	" 20
" new.....	" 25....	20....	15	" 20
" old.....	" 25....	20....	15	free.

U.

Umber.....	....	20....	15	lb. $\frac{1}{2}$ ct.
Umbrellas.....	per cent. 30....	30....	24	per cent. 30
Umbrella furniture.....	" 30....	30....	24	" 30

V.

Valencias, wool.....	per cent. 40....	30....	24	lb. 12 cts. and p. ct. 25
" worsted.....	" 30....	25....	19	per cent. 30
Valonia nut.....	free,....	5....	free,	free.
Vanilla, beans.....	" 20....	20....	15	" 10
" plants of.....	free,....	free,....	free,	free.
Varnishes, of all kinds.....	" 20....	20....	15	" 20
Vases, porcelain.....	" 30....	30....	24	" 30
Vegetables, prepared.....	" 20....	40....	30	" 30
" used in dyeing, crude,	free,....	5....	free,	free.
" not otherwise provid-				
ed for.....	" 20....	20....	15	" 10
Veils, lace, cotton or silk.....	" 50....	30....	24	" 30
Vellum.....	" 25....	30....	24	" 30
Velvet binding, cotton.....	" 30....	25....	24	" 30
" " silk.....	lb. \$2.50....	25....	19	" 30
" cotton.....	" 30....	20....	24	" 30
" silk.....	lb. \$2.50....	25....	19	yd. \$3. or less per ct. 25
" ".....	" \$2.50....	25....	19	" over \$3. " 30
" terry, or figured, in strips				
for buttons.....	per cent. 20....	5....	4	per cent. 20
Velveteens, cotton.....	" 30....	25....	24	" 30
Veneering rods.....	" 30....	30....	24	" 30
Venetian red, in oil.....	" 30....	30....	24	" 20
Venison hams.....	lb. 3 cts....	20....	15	lb. 2 cts.
Veratrine, med. prep.....	per cent. 20....	20....	24	per cent. 30
Verdigris.....	" 20....	20....	15	" 10
Verditure.....	" 20....	20....	15	" 20
Vermicelli.....	" 30....	30....	24	" 30
Vermilion.....	" 20....	20....	15	" 20
Vessels, cast iron, not otherwise				
specified.....	lb. 1 $\frac{1}{2}$ cts....	30....	24	lb. 1 ct.
" copper.....	per cent. 30....	30....	24	per cent. 30
Vestings, cotton.....	" 30....	25....	24	" 30
Vests.....	per cent. 50....	30....	24	per cent. 30
Vinegar.....	gal. 8 cts....	30....	24	gal. 6 cts.

	1842.	1846. per ct.	1857. per ct.	1861.
Violins	per cent. 30....	20....	15	per cent. 20
Violin strings, gut or wire.....	"	15....	20....	" 20
Vitriol, blue.....	lb. 4 cts....	20....	15	" 20
" green.....	" 2 cts....	20....	15	lb. $\frac{1}{2}$ ct.
" oil of.....	" 1 ct....	10....	4	per cent. 10
" white.....	per cent. 20....	20....	15	per cent. 20

W.

Wadding paper.....	per cent. 30....	30....	24	per cent. 30
Wafers.....	"	25....	30....	" 30
Wagon boxes.....	lb. 1 ct....	30....	24	lb. 2 cts.
Waiters, all.....	per cent. 30....	30....	24	per cent. 30
Walking sticks or canes.....	"	30....	30....	" 30
Ware, chemical, earthen pottery.	"	30....	30....	" 20
" painted.....	"	30....	30....	" 25
Wash balls.....	"	30....	30....	" 30
Washes.....	"	25....	30....	" 30
Waste, or shoddy.....	"	10....	5....	" 10
Watch crystals, when not set ...	gross \$2.00....	30....	24	" 30
Watches.....	per cent. 7 $\frac{1}{2}$	10....	8	" 15
Watch materials and parts of				
watches.....	"	7 $\frac{1}{2}$	10....	" 15
Watch pipe keys.....	"	30....	30....	" 30
Water wheels of iron.....	"	30....	30....	" 30
" colors.....	"	20....	30....	" 30
Wax beads.....	"	30....	30....	" 30
" bees', bleached or unbleach'd	"	15....	20....	" 10
" sealing.....	"	25....	30....	" 30
" shoemakers'.....	"	15....	20....	" 20
Wearing apparel, now, wool....	"	50....	30....	lb. 12 cts. and p. c. 25
" " " other....	"	50....	30....	per cent. 30
Webbing, India rubber.....	"	30....	30....	" 30
Wedgewood ware.....	"	30....	30....	" 30
Weld.....	free,...	5....	4	free.
Wet blue.....	"	20....	20....	" 20
Whalebone, of foreign fishing...	"	12 $\frac{1}{2}$	20....	" 20
" of American fishing.	free,...	free,...	free,	free.
Wheat.....	bush. 25 cts....	20....	15	bush. 20 cts.
" flour.....	112 lbs. 70 c....	20....	15	per cent. 10
Whetstones.....	per cent. 20....	20....	15	" 20
Whips.....	"	25....	30....	" 30
Whisky, all.....	gal. 60 cts....	100....	30	gal. 40 cts.
Whiting.....	lb. 1 ct....	20....	15	lb. $\frac{1}{2}$ ct.
Wick cottons or wick yarns, as				
cotton yarn.....	per cent. 30....	25....	24	per cent. 30
Wigs.....	"	25....	30....	" 30
Willows.....	"	25....	20....	" 20
Wines, all.....	gal. 60 c....	40....	30	" 40

	1842.	1846. per ct.	1857. per ct.	1861.
Wire, bonnet or cap, covered with				
silk	lb. 12 cts.	25.... 19		lb. 2 cts. and p. ct. 15
" brass	per cent. 25.... 30.... 24			per cent. 30
" all other	lb. 8 cts.	30.... 24		lb. 2 cts. and p. ct. 15
Wood, bar	free,.... 5.... free,			free.
" Brazil	free,.... 5.... free,			free.
" Braziletto	free,.... 5.... free,			free.
" camwood	free,.... 5.... free,			free.
" carmaguey	free,.... 5.... free,			free.
" chess men	per cent. 30.... 30.... 24			per cent. 30
" dye, all in sticks	free,.... 5.... free,			free.
" ebony and granadilla	" 20.... 20.... 8			free.
" fire	" 20.... 30.... 24			" 20
" fustic	free,.... 5.... free,			free.
" goncallo, aloes	" 30.... 30.... 24			" 20
" jacks	" 30.... 30.... 24			" 30
" lignum vitæ	" 30.... 30.... 8			free.
" log	free,.... 5.... free,			free.
" Nicaragua	free,.... 5.... free,			free.
" Pernambuco	free,.... 5.... free,			free.
" quassia, crude	per cent. 20.... 20.... 15			free.
" queen's	free,.... 5.... free,			free.
" red	free,.... 5.... free,			free.
" sanders	free,.... 5.... free,			free.
" rose, satin, cedar, mahogany, and all cabinet	per cent. 20.... 20.... 8			free.
" Rio de la Hache	free,.... 5.... free,			free.
" sandals, in sticks, dust or powder	free,.... 5.... free,			free.
" Santa Martha, and other dye-woods	free,.... 3.... free,			free.
" unmanufactured, of any kind not enumerated	per cent. 20.... 30.... 24			per cent. 20
" all manufactures of, not otherwise specified	" 30.... 30.... 24			" 30
Wool, all manufactures of	" 40.... 30.... 24			lb. 12 cts. and p. ct. 25
" and hair of alpaca, goat, other like animals unmanufactured—value, less than 18 cts. }	7c. or less, } free,.... free,			" 5
Do. do. at 18 cts.	lb. 3c. & p. c. 30.... free, .. free,			" 10
Do. do. 18@24 cts.	" " 30.... 24			lb. 3 cts.
Do. do. over 24 cts.	" " 30.... 24			" 9 cts.
Wool, belts for paper	per cent. 25.... 30.... 24			" 25
" blankets for printers	" 25.... 30.... 24			" 25
" bunting and all colored	" 40.... 30.... 24			" 30
" carpets, value \$1.25 per yard or less	yd. 65 cts. 30.... 24			yd. 40 cts.
" carpets, val. over \$1.25 yd.	" 65 cts. 30.... 24			" 50 cts.
" " Brussels and tapestry	" 55 cts. 30.... 24			" 30 cts.

	1842.	1846. per ct.	1857. per ct.	1861.
Wool, carpets, treble ingrain and Venetian.....	yd. 30 cts.....	30....	24	yd. 30 cts.
" clothing, ready made, all kinds	per cent. 50....	30....	24	lb. 12 cts. and p. ct. 25
" cloths, shawls, and all manufactures.....	" 40....	30....	24	" 12 " " 25
" delaines, cashmeres, barege, gray.....	" 40....	30....	24	per cent. 25
" druggets, bookings, felts, and carpetings.....	yd. 14 cts.....	30....	24	yd. 20 cts.
" embroideries, webbing ...	per cent. 40....	30....	24	per cent. 30
" hats	each 18 cts.....	20....	15	" 20
" " hat bodies, listing....	" 18 cts.....	20....	15	" 20
" on the skin	lb. 3c. & p. c. 30....	20....	15	" 15
" waste or shoddy.....	free,....	5....	4	" 10
" all other unmanufactured..	lb. 3c. & p. c. 30....	30....	24	" 10
Woollen bags.....	per cent. 40....	30....	24	" 30
" cassimere	" 40....	30....	24	lb. 12 cts. and p. c. 25
" stockings, bindings, mitts, gloves, floor cloth or hosiery...	....	30....	24	" 30
Woollen and worsted yarn,				
Finer than No. 14.....	" 30....	30....	19	" 30
Value 50 cts. or less, and not finer than No. 14.....	" 30....	30....	19	" 25
Value 50 cts. and not over \$1	" 30....	30....	19	lb. 12 cts. and p. ct. 15
" over \$1.....	" 30....	30....	19	" 12 " " 25
Worms for stills.....	" 30....	30....	24	per cent. 30
Wormwood, oil of.....	" 30....	30....	24	" 30
Worsted stuff, all piece goods ...	" 30....	25....	19	" 30
" and silk shawls	" 30....	30....	24	" 30
" " " hemmed	" 30....	30....	24	" 30
" " manufactures of.....	" 30....	25....	19	" 30
" all manufactures of	" 30....	25....	19	" 30

Y.

Yams .....	....	20....	15	per cent. 10
Yarns, coir.....	....	20....	15	lb. 1 ct.
" hemp .....	....	20....	15	lb. 4 cts.

Z.

Zinc, nails	per cent. 30....	30....	24	per cent. 30
" in pigs, or unwrought.....	" 20....	5....	4	lb. 1 ct.
" in sheets.....	" 10....	15....	12	" 1½ cts.
" oxide of.....	" 20....	20....	15	" 1½ cts.
" manufactures of	" 30....	30....	24	per cent. 30

The following circular has been issued from the Treasury Department, explanatory of some of the provisions of the tariff act. The 5th section of the act of 1857, alluded to in the circular, is the clause making the decision of the collector binding in cases of dispute concerning duties, &c., unless written notice is given within ten days that the decision is unsatisfactory. The section will be found on page 544 :—

TREASURY DEPARTMENT, March 20, 1861.

SIR :—As numerous inquiries have been made respecting various provisions of the Tariff Act of March 2, 1861, it is deemed proper to state for your information and government, as well as the information of others concerned, the views in part entertained by this Department on the subject.

All questions of liability to duty or exemption therefrom, of merchandise imported under the provisions of the new tariff, and questions as to the rates of duty thereon, will be determined in accordance with the provisions of the 5th section of the Tariff Act of 1857, which section will, in the opinion of this Department, still remain in force on and after the 1st proximo, unrepealed and unmodified.

The clause in the Tariff Act of 1861 repealing such of existing laws as are repugnant to its provisions, is not considered to change or modify the warehousing or appraisement laws and regulations now in force, except in one particular, which is, that in cases where a bill of lading is presented showing the day of actual shipment certified to by a consular officer of the United States, such date, in lieu of the "period of exportation" prescribed by existing laws, shall be the date at which the foreign market value of the merchandise shall be estimated and ascertained by the appraisers, in order to the assessment of *ad valorem* duties.

In the case of merchandise actually on shipboard and bound to the United States, on or before the 17th inst., and of merchandise on board of vessels in port on the 1st of April next, where the vessels have been regularly entered at the Custom-house, the owners or importers of such merchandise will be permitted to enter for consumption or warehousing at the rates of duty now existing, or if the rates of duty on the merchandise are lessened by the tariff of 1861, they may at their option, enter at the lesser rates. The same privilege will be extended to all merchandise in public store, unclaimed on the 1st proximo, when entered for consumption or warehousing in pursuance of law; and all merchandise in warehouse under bond on the 1st proximo, will be entitled to entry for withdrawal at rates of duty now existing, or if the rates of duty on the merchandise are lessened by the tariff of 1861, the entry thereof may, at the option of the importer or owner, be made at the lesser rates.

In allowances on account of tare, draft, &c., on goods subject to specific duty under the new tariff, officers of the customs will be governed by the provisions of the 58th and 59th sections of the General Collection Act of March 2, 1799, which are again brought into operation. I am, very respectfully,

S. P. CHASE, Secretary of the Treasury.

AUGUSTUS SCHELL, Esq., Collector, &c., New York.

There are a number of discrepancies discoverable in the provisions of the tariff, to the most obvious of which we call attention. Thus Peruvian bark is by section 19 chargeable with a duty of 10 per cent; by section 23 it is made free. Staves by section 20 are charged with 20 per cent duty, and are made free by section 23. By section 9 spirits of turpentine are taxed 10 cents per gallon, and by section 20 they pay 20 per cent. Wool, unmanufactured, is charged 5 per cent when valued less than 18 cents at the place of exportation, and exceeding 18 cents, it pays 3 cents per pound. It would seem, therefore, that if any were valued exactly at 18 cents, it would come under the general provision of 10 per cent.

JOURNAL OF BANKING, CURRENCY, AND FINANCE.

SPECIE MOVEMENT IN FRANCE.

The import and export into and from France, during the past three years, has been, according to the official reports, as follows :—

	Gold.			Silver.		
	1858. France.	1859. France.	1860. France.	1858. France.	1859. France.	1860. France.
Import.	553,556,400	726,759,300	469,824,600	160,619,380	200,540,420	131,307,700
Export.	66,620,100	188,080,200	159,456,600	175,741,720	382,187,940	288,222,760
Ex. imp.	486,936,300	538,679,100	309,368,600	.....	.....	.....
Ex exp.	.....	.....	.....	15,122,340	181,447,520	156,915,060

From these figures, it appears that the excess of gold imported into France, in three years has been 1,326,984,000 francs, or the large sum of \$248,809,500. The excess of silver exported in the same period has been 353,684,920, or \$66,315,922. It is a singular fact, that notwithstanding this large and continuous drain of silver, and which was said to have produced an inconvenient scarcity of franc pieces a year or two since, the specie held by the Bank of France is mostly silver. Thus, in November last, when an exchange of \$10,000,000 worth of silver, for \$10,000,000 worth of gold took place with the Bank of England, the Bank of France held \$65,000,000 silver, and \$20,000,000 of gold.

BRITISH LEATHER BANKRUPTS.

The proceedings before the Commissioners of Bankruptcy in London, present some curious details. There were eleven London houses and seven Liverpool houses under examination, and the aggregate transactions were given for four years as follows :—

	Leather and hides bought and sold.	Amount of bills running.
London houses.....	£774,504	£5,895,189
Liverpool houses.....	238,335	1,875,897
Total	£1,012,839	£7,271,086

The amount of bills was thus shown to be more than seven times the amount of actual business transacted, and the fact occasioned merriment in the court. This load of bills had been carried through four years without apparently exciting the surprise of the bankers through whose hands they passed. The whole fabric had been reared upon, and revolved round, the house of STREETFIELD & Co., which dealt with the others on the basis of paying their cash for leather, and taking the paper for goods sold to them; thus in effect, centering the finances of all in the hands of LAWRENCE the financier for STREETFIELD & Co., in the same manner that the finances of the great manufacturing bubble in this country, was a few years since concentrated in the hands of another Mr. LAWRENCE, of the Bay State Mills.

INSOLVENCY CASES IN SAN FRANCISCO.

The Insolvent List of San Francisco for the year 1860 shows a total of debts amounting to \$1,019,416, and of assets \$76,787. The following table shows the statistics of the two courts which have jurisdiction of such cases, of the cases commenced during the year :—

	4th Dist. Court.	12th Dist. Court.	Total.
Number of suits.....	57	31	68
Debts.....	\$556,604	\$462,812	\$1,019,416
Assets.....	22,750	54,037	76,787
Deficit.....	533,854	408,775	942,629
Number of insolvents discharged.....	17	21	38
Suits discontinued..	1	1	2
Undecided.....	19	9	28

The number of suits brought (with their debts and assets) in 1860, as compared with each of the last five years, has been as follows :—

Years.	No. suits.	Debts.	Assets.	Deficit.
1855.....	197	\$8,377,827	\$1,519,175	\$6,858,652
1856.....	146	3,401,042	657,908	2,743,134
1857.....	125	2,375,899	812,417	1,563,482
1858.....	96	1,940,662	658,782	1,281,880
1859.....	60	706,219	208,044	498,175
1860.....	68	1,019,416	76,787	942,629
Total 6 years.....	692	\$17,821,065	\$3,983,113	\$13,887,952

The display looks very serious. There was a regular decrease from 1855, when the great failures began, down to 1859, and then the increase began again. The *Alla California* says :—

The amount of assets is proportionably smaller for 1860 than at any previous time, but in fact the assets are almost invariably nominal, consisting of bad debts that never can be collected, and property estimated at cost, but worthless in the market. It is rarely that a man declares himself insolvent so long as he has property which he can turn into money. Our insolvent law is very liberal to debtors, and no doubt that contributes, with the very speculative temper of our population, the facility for getting credit, and the unsteady course of our trade, to make our insolvent lists so large.

BANKS OF CANADA, JANUARY, 1861.

Banks.	Circulation.	Specie.	Loans.
Bank of Montreal.....	\$2,874,264	\$1,252,263	\$9,010,215
Quebec Bank.....	652,876	157,107	1,832,130
Bank of Upper Canada.....	2,118,137	567,896	6,338,333
Commercial Bank.....	2,093,403	542,817	7,058,224
City Bank.....	467,688	188,268	1,089,095
Gore Bank.....	746,805	122,921	1,228,173
Bank of British North America...	1,161,482	626,320	5,229,486

PIKE'S PEAK GOLD.

A correspondent at Pike's Peak gives the following in relation to the yield of gold in that region :—

Those who ought to know, estimate it at six millions, although, by the general mismanagement of the quartz mills, this falls far below the anticipations of last spring. Messrs. CLARK, GRUBER & Co., of Leavenworth, purchased \$42,756 worth of gold during the month of December, the purchases of their house for the year 1860 being \$116,895, which, added to their coinage in Denver—\$140,000—makes the total operations of this firm in one year \$256,000. The receipts of the Central Overland California and Pike's Peak Express Company, of Messrs. JONES & CARTWRIGHT, and other banks of the city, added to the above amount, will make the receipts of Leavenworth alone equal to half a million. St. Joseph and Omaha have probably received as much each, and Atchison, Kansas City, and Nebraska City are credited with no insignificant sums; yet the bulk of the gold has gone past the Missouri River, in the hands of returning miners, and when a general footing up is had with the United States Mint and its branches, it will no doubt show a credit to Pike's Peak of between five and six millions.

A considerable portion of the coinage of Messrs. CLARK, GRUBER & Co. has been re-coined at the United States Mint in Philadelphia, and branches at New York and New Orleans. The returns are noticeable, not only for the favorable exhibition of the accuracy and fairness of the pioneer mint, but also on account of certain discrepancies in the operations of the different establishments, which appear somewhat extraordinary, in departments where the greatest accuracy and similarity should exist. One hundred dollars of this coin, sent to New Orleans Branch, weighed, before melting, 5.91 ounces; after melting, 5.91; its fineness was assayed at .817; and value, after deducting fifty cents for cost of coinage, returned at \$99 28. A like amount of the same lot of coin sent to Philadelphia, weighed, before melting, 5.92 ounces; after melting, 5.92; fineness assayed at .815; value of gold, after deducting eighty cents for coinage, returned at \$99 05; value of silver, \$1 28; making the total value \$100 33. An amount of eight hundred dollars, sent to the New York Assay-office, weighed, before melting, 47.07 ounces; after melting, 47.06; fineness assayed at .821; value of gold, \$798 68; of silver, \$10 09; charges for coinage, \$6 39; leaving a net value of \$802 38. In comparing these returns, it will be seen that a coin of CLARK, GRUBER & Co.'s mint exceeds a United States coin of the same denomination in value one-third of one per cent. It will also be seen that the New York and Philadelphia mints return a credit for silver at about the rate of one dollar and twenty-eight cents on the hundred dollars, while the New Orleans Branch returns none. The charges of the latter for coinage are thirty cents less than the two former, yet by making no return for silver they gain ninety-nine cents. The New York Assay-office invariably makes the coin assay a greater fineness than the others by several thousandths.

 RATE OF STATE TAXATION.

The rates of taxation at the West are as follows :—

Michigan, *two mills* per dollar of valuation.

Ohio, in 1851, *three mills* per dollar of valuation.

STATISTICS OF TRADE AND COMMERCE.

COMMERCE OF FRANCE.

During the last three years some important changes have been made in the commercial policy of France. Among the most important were those effected by the commercial treaty of England, attended and followed by various modifications in the duties on such goods as more or less affected the general commercial interests of France. The articles on which the duties on which were most affected by the Imperial decrees were coffee, sugar, cocoa, indigo, cotton, wool, coal, &c. These duties underwent large reductions, the wisdom of which was more or less contested, and it is hardly yet time to form a sound judgment upon them. When a similar policy was adopted in England in 1842, it was some years before its beneficent influence was fully admitted. It is also to be considered that the success of a general policy is not to be judged by the actual effect upon a particular article. In many cases a diminution of tax does not result in an improved revenue from the duties on that article. The effect of a general reduction is to cause certain articles to be greater in demand, but necessarily all. Thus, in England, the duty on tobacco was left very high, but reduction in the cost of bread enabled consumers to use more tobacco. The official returns of French commerce for the past three years show that the revenue has not improved under the reduction, since the customs for 1860 gave 131,385,000*f.* against 189,493,180*f.* in 1859, and 182,614,705*f.* in 1858. The returns also give the quantities imported under the heads of "general commerce" and "special commerce;" the latter meaning the exports of French goods and imports for French consumption, the former including all goods crossing France to and from the interior of Europe:—

IMPORTS INTO FRANCE.

	General commerce.			Special commerce.		
	1860.	1859.	1858.	1860.	1859.	1858.
Oxen & bulls, head	30,952	24,612	23,187	30,240	24,591	23,141
Cows	55,846	53,513	42,742	55,798	53,502	42,741
Calves and heifers	37,632	33,879	33,856	37,626	33,879	33,856
Sheep	477,440	455,358	389,302	477,269	455,358	389,143
Wines hecto.*	194,275	142,931	121,467	173,668	127,547	113,170
Alcohols	119,322	87,171	48,062	92,413	45,962	38,998
Cocoa . . . quintals*	63,642	50,451	57,909	47,027	40,913	38,310
Coffee	616,787	495,930	333,186	343,443	308,182	282,008
Grain	1,819,881	2,658,000	4,214,107	761,097	1,879,700	2,380,688
Flour	28,946	11,347		10,838	17,239	
Hemp, peeled, &c.	69,387	69,388	54,569	62,492	54,782	70,742
Cochineal	8,329	4,023	3,608	3,276	2,451	2,367
Cotton	1,392,839	916,564	998,915	1,256,988	616,176	795,530
Flax & hemp yarn	23,627	11,224	7,616	16,167	7,035	4,670
Oleaginous seeds.	1,098,406	1,058,127	815,017	976,664	843,220	756,748
Tallow, lard, &c. .	45,647	23,832	60,985	23,576	14,292	45,725
Hops	11,871	11,930	.....	11,133	10,967	.....
Coal—Belgium ..	30,323,992	28,658,989	27,194,470	30,031,660	28,265,150	26,802,065
England	13,279,884	14,609,585	12,293,895	11,605,859	11,666,914	11,339,230
Zollverein	7,921,049	6,674,212	7,409,419	7,334,718	6,350,835	7,251,243
Other places ..	166,543	156,137	53,215	242,028	174,755	52,799
Total	51,691,468	50,098,823	47,650,499	49,214,265	46,457,654	45,445,337

Statistics of Trade and Commerce.

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	General commerce.			Special commerce.		
	1860.	1869.	1868.	1860.	1869.	1868.
Coke.....	532,033	4,587,901	5,315,983	4,585,728
Oils.....	447,957	350,257	389,085	331,634	272,578	303,740
Indigo.....	13,525	10,677	11,864	15,248	9,541	7,562
Wool—Zollverein.	29,462	30,556	18,764	29,646	30,440	17,280
Belgium.....	19,684	8,226	9,017	20,525	7,955	8,745
England.....	136,696	89,051	134,899	121,953	89,226	112,294
Spain.....	58,375	40,534	27,696	57,315	37,980	33,778
Turkey.....	48,808	43,579	28,011	50,515	37,367	39,624
Barbary States.	32,754	6,960	16,837	39,532	8,126	21,484
Rio de la Plata.	57,862	59,001	45,114	56,593	44,818	35,206
Algeria.....	64,119	72,778	35,185	64,129	72,778	35,108
Other places ..	75,615	72,610	64,384	92,179	71,709	56,678
Total	521,885	423,295	379,357	532,287	400,409	360,187
Flax, peeled, &c..	207,607	159,243	251,639	191,126	159,613	206,876
Machines . . francs	6,561,274	6,549,214	.....	3,239,920	3,645,376	.....
Pig iron, quintals:						
England.....	600,664	633,369	706,555	202,724	266,047	412,577
Belgium.....	160,876	168,543	207,788	55,017	140,166	190,910
Other places ..	74,876	59,949	58,598	20,117	23,997	31,235
Total.....	835,916	844,961	972,941	277,858	430,220	634,744
Bar iron.....	267,071	270,902	335,153	4,243	14,187	123,180
Steel.....	17,631	23,713	17,238	3,213	7,711	5,552
Copper.....	133,080	127,151	112,412	132,344	122,708	111,848
Tin.....	28,032	32,369	24,159	28,186	32,770	25,847
Lead.....	343,178	331,561	315,688	151,448	221,438	202,744
Zinc.....	305,220	230,739	240,708	304,923	237,999	240,152
Pepper.....	37,645	41,965	29,472	22,528	23,665	22,447
Salt.....	116,807	168,622	112,784	56,855	39,934	38,769
Do., refined	4,310	358	819	192	588	1,220
Sulphur	455,448	525,289	370,464	453,606	515,390	365,006
Colonial sugar....	1,186,063	1,126,781	1,091,366	1,513,785	932,897	1,164,736
Foreign sugar ...	598,454	756,485	470,092	470,712	596,464	395,211
Flax & hemp ties	20,901	13,888	10,875	14,322	10,043	8,739
Meat, fresh & salt	36,150	68,862	14,403	27,199	45,976	13,359
Arachis(earth nut)	332,464	344,602	.....	331,998	343,207	.....
Wood for cabinet making.....	113,523	96,317	56,608	102,446	113,631	57,314
Silk.....	52,784	46,276	52,554	38,089	32,510	39,090
Nitrates	120,229	173,317	152,193	149,754	114,186	120,334

EXPORTS FROM FRANCE.

	General commerce.			Special commerce.		
	1860.	1869.	1868.	1860.	1869.	1868.
Oxen & bulls head	19,057	16,379	13,259	13,942	16,358	13,232
Cows.....	15,256	13,674	14,624	15,232	13,663	24,229
Calves and heifers	8,549	6,573	6,890	8,549	6,573	6,890
Sheep.....	63,770	62,477	53,696	63,642	62,478	53,507
Wines, ord'ry. hec.	1,961,298	2,491,205	1,587,657	1,941,632	2,478,865	1,580,299
Of which to Eng'd	108,799	48,233	not stated	107,072	47,876	not stated
Do., superior	74,173	68,438	40,802	70,423	66,968	39,401

	General commerce.			Special commerce.		
	1860.	1869.	1868.	1860.	1869.	1868.
Cotton yarn.....	8,204	5,211	8,582	1,359	856	491
Do.with drawback .....	.....	.....	.....	1,971	2,106	2,649
Madder.....	124,764	142,316	183,215	80,977	120,843	121,941
Flax & hemp, peel	34,237	31,165	32,191	27,390	20,047	23,370
Books, engravings, & lithographs..	22,371	20,384	20,473	21,578	19,688	19,813
Machines ..france	21,280,364	17,997,855	16,077,702	7,798,672	6,514,325	5,790,494
Millinery	5,335,646	6,064,984	7,822,940	5,161,361	5,914,448	7,491,015
Of which to Eng'd	276,519	997,087	not stated	861,476	979,970	not stated
Porcelain, quintals	58,350	57,470	46,682	57,872	57,062	48,560
Soap.....	75,505	87,717	85,872	2,392	2,393	1,824
Do.with drawback .....	.....	.....	.....	73,039	84,793	84,015
Salt	995,189	1,181,498	1,301,457	927,172	1,111,767	1,240,310
Silk.....	22,278	22,695	15,669	6,680	7,779	5,541
Refined sugar ...	503,963	584,485	566,788	1,337	973	49
Do.with drawback .....	.....	.....	.....	487,884	527,459	559,651
Silk tissues	45,715	46,978	37,194	34,651	35,194	27,312
Glass and crystals	338,335	324,674	296,058	80,312	80,372	90,018
Do.with drawback .....	.....	.....	.....	249,617	241,128	202,620
Wood for cabinet making.....	24,162	.....	.....	23,326	.....	.....
Cochineal	1,638	.....	.....	778	.....	.....
Cotton.....	232,246	.....	.....	90,451	.....	.....
Tin	1,454	.....	.....	655	.....	.....
Indigo.....	3,800	.....	.....	1,559	.....	.....
Wool.....	73,967	.....	.....	54,810	.....	.....
Nitrates.....	9,813	.....	.....	3,820	.....	.....
Prepared skins & gloves.....	85,357	85,778	76,193	70,561	71,951	64,401
Do.with drawback .....	.....	.....	.....	4,808	5,511	5,162
Cotton tissues ...	182,109	188,775	182,347	39,340	18,637	9,338
Do.with drawback .....	.....	.....	.....	64,348	72,548	81,945
Flax & hemp tiss's	29,123	24,449	24,211	22,636	18,611	20,338
Woolen tissues...	114,083	88,592	75,984	30,518	14,302	9,527
Do with drawback .....	.....	.....	.....	54,225	51,599	46,791
Oilcake.....	329,152	192,202	176,952	339,152	189,807	173,362

NEW STEAM LINE TO EUROPE.

PROCEEDINGS OF A MEETING HELD AT THE HALL OF THE BANK OF CHARLESTON, 22D FEBRUARY, 1861.

The meeting was organized by calling G. M. Coffin, Esq., to the Chair. Mr. Coffin explained the object of the meeting to be the adoption of such measures as will secure the establishment of a direct line of steamships between Charleston and Liverpool.

Proposals of a very favorable nature had been made to some of our prominent citizens, who, upon consultation, referred them to a committee of persons of experience, to examine carefully. This committee was now ready to report.

Mr. Mure, on behalf of the committee, then read their report, as follows:—

The committee appointed to consider the proposals submitted by Mr. Barry, on behalf of persons in England, with a view to the establishment of a line of steamships between Liverpool and Charleston, beg respectfully to report:—

1st. That, in common with the whole community, they recognize the necessity of a steamship line to Europe as a means of preserving the commercial importance of Charleston.

2d. That, upon a careful investigation into all the details of expenditure, and a moderate estimate of the probable earnings of boats well adapted to this trade, they are firmly persuaded that such a line of steamers, judiciously managed, would pay handsome profits to the stockholders.

3d. That the proposals submitted by Mr. Barry, are, in brief, as follows :—

1st. The parties whom he represents, Mr. A. M. Weir, a very respectable gentleman of London, already largely interested in steamships, and Messrs Laird & Co., whose reputation as builders is unrivaled, will agree to raise in Great Britain one half of the capital requisite for this enterprise, if the remainder can be raised here. The proposed capital is £150,000, or nearly \$750,000.

2d. A joint stock company is to be formed in England, under the Limited Liability Act, in which the Charleston shareholders will be on the same footing with all others.

2d. The company, once formed, is to build three iron screw propellers, and to place them in a regular line between Liverpool and Charleston.

4th. The steamers are to be built by Messrs. Laird & Co, with special view to the peculiar necessities of our port and its commerce.

In the preliminary specifications it is stated that steamers of 1,800 tons measurement, capacity 4,000 bales of cotton, (taking the bale at 440 lbs.,) and with engines of 250 horse power, will cost £47,000 each. The horse power is nominally under the Admiralty rule, the effective capacity of the engines so rated is about 600 horse power.

These proposals seem to the committee to be made in good faith; they certainly emanate from parties entitled to the utmost confidence.

The means of information possessed by those with whom the measure originated, is such, that their willingness to take half the risk should convince us of the intrinsic merits of the enterprise.

The proposals are extremely advantageous to us, inasmuch as if we avail ourselves of them, we secure all the advantages of the line to the commerce of the port, while we bear but half the cost.

It is also but too certain, that if, with our profound conviction of the importance of steam communication with Europe, at a moment when that importance assumes the proportions of a vital necessity, we decline to seize such an occasion of establishing a line, not only will foreigners undervalue the honesty of our declarations, but we shall lose so much consideration in our own eyes, and those of our neighbors, that similar projects will hereafter seek other communities, and we shall be left in the repose of an inglorious inactivity, forgotten and contemned. On the other hand, a prompt and vigorous prosecution of this enterprise to a successful termination, will not only accomplish the immediate end in view, but will invigorate the commercial energies of our people, and establish a prestige in their favor, which will be of no little consequence in the future now opening upon the South.

Your committee would therefore propose that a committee of twelve be appointed by this meeting, to make a subscription list, and solicit subscriptions to the enterprise, upon such conditions as will agree with the proposals submitted by Mr. Barry.

M. BERRY, Chairman.
ROBERT MURE.
FRED. RICHARDS.
GEO. S. CAMERON.
W. L. TRENHOLM.

On motion, it was resolved that the Chairman of the meeting should be *ex-officio* Chairman of the Committee.

The following gentlemen compose the committee, under the above resolution :—
 Geo. M. Coffin, Esq., Chairman ; Theodore D. Wagner, William McBurney,
 William O. Bee, William C. Courtney, William M. Sage, Robert Mura, Francis
 J. Porcher, Frederick Richards, Henry Gourdin, William Lebby, J. Clough
 Farrar.

**PROSPECTUS OF THE LIVERPOOL AND CHARLESTON STEAMSHIP COMPANY (LIMITED)
 OF LIVERPOOL, INCORPORATED UNDER THE JOINT STOCK COMPANIES' ACT—
 CAPITAL £150,000, IN 15,000 SHARES OF £10 EACH, WITH POWER TO IN-
 CREASE.**

This company is proposed to be formed for the purpose of establishing a direct line of steamers between Liverpool and Charleston, with power to call at an Irish port for passengers.

It is designed to build three iron screw propellers, specially adapted to this particular trade, and affording the highest degree of comfort and convenience to the traveling public.

Negotiations have been commenced with Messrs. John Laird, Sons & Co., for the construction of such steamers, each of which it is contemplated will be of about 1,800 tons, builder's measurement, with a pair of engines of 250 horse power, (collective,) costing about £47,000. It will be expressly stipulated that these vessels shall be of sufficient light draught of water, with capacity to carry about 4,000 bales of cotton, and with suitable accommodations for first and second class passengers. A careful estimate has been made of the probable expenses and earnings of the proposed line, based upon accurate and reliable data obtained in Great Britain, from which it appears that there is every reasonable prospect of the stock being a highly remunerative investment.

This estimate has been examined by persons possessing a practicable knowledge of the commerce of Charleston, and has obtained their unqualified approbation.

Parties of high respectability in Great Britain, have undertaken to raise half the proposed capital, provided the rest can be obtained here. Payment for the stock will be required in five equal instalments, at intervals of not less than two months. First payment to the builders will be made when the contract is signed.

The articles of association will be drawn up in such a manner as to secure to the stockholders in this country equal privileges with all others, and will be subject to the approval of such persons in England as they may designate. The company will be registered under the Limited Liability Act, which protects the shareholder from any liability beyond the amount invested.

BOMBAY CHAMBER OF COMMERCE REPORT FOR THE YEAR 1859-60.

This report is necessarily confined to local objects, such as railway communication as it affects Bombay, and electric telegraphs, which appear to be greatly appreciated by the Indian public. No less than 170,566 private messages had been dispatched in 1859-60, against 101,164 in the previous year, showing an increase of no less than 68 per cent, and the receipts from them being 4,23,991 rs, against 2,83,103 rs, an increase of very nearly 50 per cent. India is now supplied with a network of wire extending nearly 11,000 miles.

The most interesting portion of the report, and that which occupies the principal attention of the Bombay Chamber, is the cotton cultivation. It would appear that the East India Company's experiments for the purpose of introducing the cultivation of American cotton, are now brought to a close. They com-

menced in 1788, and have hitherto resulted, notwithstanding an expenditure of £350,000, in signal failure.

The main causes of failure may be summed up as follows :—Indifference on the part of the managers and employees, or ignorance and bigoted opposition on the part of the native cultivators. Dilatoriness in forwarding the foreign seed, by which the proper seed-time was allowed to pass over, and the seed became useless.

Wholesale destruction of promising plantations by the inroads of cattle, in most cases doubtless with the connivance of their owners, who, in dry seasons, were not unwilling to fatten their cattle at government expense. And lastly, to the continual change of collectors who took an active interest in the cultivation, for those who took no interest whatever in the matter.

The successful experiments in Dharwar, fully bear out all these allegations. Nothing could have been more unpromising, at times, than the prospects of the cotton cultivation in that district, and but for the energy of Mr. Shaw, collector of Dharwar, the experiments would have been abandoned. In 1843, only 220 acres were in cultivation; in 1846, no less than 30,000 were under American cotton; but in 1848, the amount had descended to only 3,600 acres. Since then, the average has steadily increased, as will be seen by the following table :—

Years.	American. Kuppas.	Native. Kuppas.	Total.
1851	31,688	223,314	254,982
1852	42,647	221,676	264,323
1853	28'010	251,113	279,123
1854	41,405	252,006	293,411
1855	68,298	210,260	278,558
1856	50,802	191,196	241,998
1857	82,350	196,929	279,277
1858	100,813	252,343	353,153
1859	105,406	214,993	320,399
1860	156,326	230,667	386,993

The committee seem to be of opinion that if every one had shown the same energy as Mr. Shaw, a similar success would have been the result.

It is a hopeful sign for the cultivation of cotton, that it is being taken up by those engaged as engineers on the railways now under construction, and many persons of great consideration, in many parts of India, have applied for and received American or Egyptian seed.

It seems that the Egyptian seed has turned out all that could be wished, but a remarkable circumstance has been observed regarding the American seed, viz :—that although perfectly good in March, when it reached Bombay, *it has been found in June to be worthless, not more than 1 per cent of the seed having come up.* It is probable, therefore, (says the report,) that the vitality of the American seed may be limited to the period necessary for its reproduction in the United States, where the sowing is completed in April. It is by no means improbable that this simple circumstance may be one of the chief causes of the almost general failure of the American cultivation. Now, only to have made this discovery after a lapse of 78 years, does not speak highly for those who have superintended the cultivation. Why not plant American seed as Americans do, in March and April?

It appears that one great obstacle to the cultivation has been removed by the adoption of Dr. Forbes' newly invented cottage and power-churkas. Let us hope that every means will be exerted to produce as much cotton as possible in India; for, with the prospects before us in America, no means should be left untried to open new sources of supply.

OBITUARY OF PROMINENT MERCHANTS.

OBITUARY OF PROMINENT MERCHANTS.

At West Farms, near New York City, on the evening of Friday, March 1st, 1861, WILLIAM W. FOX, in the 78th year of his age, after a brief illness. Mr. WILLIAM W. FOX was one of our old merchants, and President of the New York Gas Co. He was a member of the Society of Friends.

Died suddenly, in Quincy, Mass., on Wednesday, February 27th, SOLOMON WILLARD, Esq., aged 77 years. He was one of the earliest projectors of Bunker Hill Monument, and contributed largely towards its erection. The original models of the monument are still in his office. In 1826, with the advice and aid of the late Hon. Thomas H. Perkins, and others, he designed and surveyed, with his own hands, the Quincy Granite Railway, the first ever built in the United States. Indeed, he was the architect of many public buildings, including the Town House of Quincy. His scientific tastes were of a respectable order, as his library will show; particularly in the science of geology. But his real usefulness and good works, are particularly exemplified in the neighborhood where he so quietly and unobtrusively passed the evening of his life.

At Charleston, S. C., suddenly, Sunday, February 24th, in the 54th year of his age, WM. C. GATEWOOD, Esq., a merchant of that city, and an active director of the Southwestern Railroad Bank. He was one of the first originators of the New York and Havana packet lines, and was instrumental in the establishment of the first cotton press built in Charleston. There was scarcely any enterprise of a public character that he did not willingly aid by both his counsels and his means.

Mr. MACGREGOR LAIRD.—We regret to announce the death, on Sunday last, of Mr. Macgregor Laird, well known in connection with African exploration. At an early age, Mr. Laird relinquished his interest in an extensive engineering establishment in Liverpool, and was associated with Richard Lauder in conducting the first steam expedition up the river Niger, with a view to open up the commerce of the interior. After undergoing great hardships, he returned to England in 1832, with the few of his companions who had survived the effects of the climate. He next turned his attention to transatlantic steam navigation, and by his abilities and enterprise materially contributed to the accomplishment of that great object. Subsequently, he for a short time devoted his energies in furtherance of the great works in progress at Birkenhead. During the last twelve years of his life, Mr. Laird devoted his attention exclusively to those objects in which his heart had lain from early youth—the development of the trade and civilization of Africa, having for many years advocated this as the only means of finally extinguishing the slave trade.—*Liverpool Times*.

NAUTICAL INTELLIGENCE.

NEW BEACONS IN THE GULF OF RIGA.

Official information has been received at this office that the following beacons have been erected in the Gulf of Riga :—Two new mast beacons have been placed to show the direction of the channel into Riga. These beacons are surmounted by a triangle with the apex upwards and a small barrel placed horizontally above. They stand respectively 85 and 87 feet high and 478 yards apart, in a direction N. W. by W. $\frac{1}{4}$ W. The N. W. beacon is higher and its base larger than that of the S. E. beacon. They can be seen from a distance of 10 miles. Also, that the lower light at Riga has been turned 30° to the westward, so as to be seen from N. $\frac{1}{4}$ W. to N. W. $\frac{1}{4}$ W. And that the following beacons will be placed prior to the opening of the navigation in 1861 :—On the south side of the banks of Kuno S. W. $\frac{1}{2}$ S. $6\frac{1}{4}$ miles of the church of St. Nicholas, a red broom turned downwards. At $3\frac{1}{4}$ miles to the southward of the extremity of the Sorkholm Reef, a red broom turned downwards. On the coast of Livonia on a nine-feet shoal, which lies S. W. by W. 2 miles in advance of the cape Taker-ort, a black broom turned downwards. On an eleven-feet shoal, W. by N. $\frac{1}{4}$ N. 4 miles of the village of Kabiukula, a double broom red above and white below. On a seventeen-feet bank, which lies N. W. by N. $3\frac{1}{4}$ miles of the farm of Ainensch, a white broom placed upright. On the extremity of the reef which extends off the entrance of the river Att Silas, about $6\frac{1}{4}$ miles from the beach, in a depth of 26 feet, a double broom white above and red below. (The bearings are magnetic. Variation at Riga $8^{\circ} 15'$ west in 1861.) By order,

WASHINGTON, February 28, 1861.

THORNTON A. JENKINS, Secretary.

ELECTRIC TELEGRAPH FROM DUNWICH TO AMSTERDAM.

The following "notice" has been received at this office from the Trinity House, London :—"Permission having been granted by this corporation that buoys marked with the word 'telegraph' may be laid down in the line of direction of the submarine cable between Suffolk and Zandvoort, near Amsterdam, on the coast of Holland, notice is hereby given, that the buoys are now laid, and that it is desirable that no vessel should anchor within a quarter of a mile to the northward or southward of the line of the said buoys, lest by so doing they damage the electric cable or lose their own anchors. The line of the buoys is, from the Coast Guard Buildings at Minsmere, near Dunwich, E. S. E., by compass." By order,

WASHINGTON, December 30, 1860.

THORNTON A. JENKINS, Secretary.

NOTICE TO MARINERS.

Captain BENDIXEN, of Danish ship Benjamin Howard, at San Francisco from Manila, reports December 26, latitude $25^{\circ} 53' N.$, longitude $130^{\circ} 50' E.$ at 10 P. M., saw Borodino Island; at 12 o'clock same island bore E. S. E., distant 5 miles; observed another island in the N. E., distant about 9 miles, which is not laid down in any chart I have got; both of them are very low islands, and not advisable to be run for in a dark night, having a long, low beach extending a great way out. By order of the Lighthouse Board.

WASHINGTON, February 16, 1861.

R. SEMMES, Engineer, Secretary

COMMERCIAL REGULATIONS.

THE COMMERCE OF BRAZIL.

The following official notice has been issued by the Brazilian Government :—

CONSULATE GENERAL OF BRAZIL, }
NEW YORK, March, 1861. }

By order of the Imperial Government the following article of the Custom-house regulations of Brazil, is published for the knowledge of those it may concern.

LUIZ H. F. D'AGUIAR, Consul General.

CHAPTER SIXTH.—OF MANIFESTS.

ARTICLE 399. Every captain or master of a merchant vessel, national or foreign, who, on any account whatever, seeks any port of the empire duly qualified, as a port of entry, or habilitated for importation, must have a manifest in duplicate, which must contain—

1. The name, class, and tonnage of the vessel, and nation she belongs to.
2. The name of her commander or master.
3. The port she sailed from, port she is bound to, and ports of call.
4. The marks, countermarks, and numbers of each package, and their denomination.
5. Declaration of quality, quantity, weight, or measure of merchandise contained in each package, as near as possible, as also of merchandise in bulk.
6. Express designation of number of packages under same cover, or tied together; and quality of merchandise contained in each of said packages, and its quantity, weight, or measure, besides all declarations required in Nos. 4 and 5 of this article.
7. The names of the consignees of said packages or merchandise, or if consigned to order—

8. Express mention—First, of merchandise intended for warehousing or transit, with declaration required in Nos. 4, 5, and 6; second, of packages containing explosive or inflammable articles and the like, with all circumstances required in Nos. 4, 5, and 6.

SECTION. 1. These declarations must be written in full, except the numbers and marks on packages, and written on whole sheets of paper and not pieced to one another, and must be numbered and signed by the respective consular agent, or by the person legalizing the manifest.

ART. 400. The manifests shall be dated and signed by the captain or master of the respective vessel, and legalized by the Brazilian consul or consular agent residing at the port of her departure, and where there is none, by the chief of the respective Custom-house or revenue department, and failing both, by the local authority. In the latter case their signatures must be certified by the respective consul at the port of entry, should any doubt arise about their veracity.

ART. 401. Fishing vessels, or vessels coming from ports less frequented where there is no Custom-house or revenue department, or authority to certify and legalize the manifests, shall be obliged to deliver, on being visited on their arrival, a list of all articles comprising their cargoes, with declarations required in article 399, and to show the bills of lading, documents, and cargo book, or any other documents proving the truth of the list, besides the roll, list, and other papers required by articles 409 and 410.

ART. 402. Any vessels having called at, or received or discharged cargo in one or more ports, shall have as many manifests in duplicate as are the ports at which she may have received cargo, which shall contain the declarations, formalities, and requisites required in foregoing articles; and shall produce as many certificates, legalized in same manner as the manifests, of not having received cargo, or landed any package, merchandise, or object; and in case of some hav-

ing been landed, of quantity or number of packages or merchandise landed, with all declarations required by article 399, said certificates to be from as many ports as she may have called at.

If the port of call or discharge belongs to the empire, the manifests and certificates shall be made out by the competent Custom-house or revenue department.

ART. 403. To one of the copies of the manifest must be attached the clearance of exportation, re exportation, or transit, or a certified copy thereof, according to the custom and law of the respective port, and in case of there being none such, a copy of the bill of lading of the shipment for the package or merchandise relating thereto.

ART. 404. The consuls, authorities, or persons who, according to article 400, legalize the manifests, shall number and sign all its pages or sheets, and after passing a line in all its blanks, shall certify on the last written page of each copy of the manifest that same is in order, without erasures, corrections, enterlines, or any other thing giving cause to any doubt, or shall safeguard said informalities by mentioning their nature, quality, and tenor; and shall deliver said manifests to the commander of the vessel, one copy open and the other under cover, and sealed with consular seal, addressed to the collector of customs at the port the vessel is bound to.

The documents required by anterior articles must be also numbered and signed by the consul.

ART. 405. The dispositions of foregoing articles apply to—first, vessels sailing in ballast, the quality and quantity of which must be described in the manifest or certificate; second, vessels calling at any ports of the empire, or entering there in *franqua*; third, vessels carrying passengers or immigrants, even having no cargo on board.

SEC. 1. Shall be considered ballast, for all fiscal ends, any quantity of heavy material the vessel may carry or receive, indispensable for sailing with safety.

SEC. 2. May be considered as part of ballast—First, unwrought iron, in bars, plates, or pig iron, or in coarse castings or broken pieces; second, copper, unwrought, cast, melted, or in cakes, bars, plates, or sheets; third, brass made up into artillery or in broken pieces; fourth, unhewn, hewn, or coarsely hewn stone of any quality; fifth, flint stones, pebbles, sand, clay, ashes, bones or horns; sixth, unwrought lumber, in stumps, planks, thick boards, or for wood; seventh, coals; eighth, salt; ninth, bricks, tiles, and other building materials; tenth, water casks, filled or empty, saving disposition of section first of article 33 of decree No. 708, of 14th of October, 1850, as regards vessels referred to in same decree.

SEC. 3. The chief of the competent revenue department at the port of entry of a vessel in ballast shall, when deemed convenient for the fiscalization, verify if the quantity of ballast on board is strictly necessary for the safety of the vessel; and in case of finding same to be too much, shall subject the vessel to the fiscal rules for vessels carrying cargo.

ART. 406. The consul or consular agents of the empire shall not legalize any manifest not in accordance with foregoing articles, and shall oblige the captains to correct the same, or make out new ones.

ART. 407. The aforesaid consuls or consular agents, before certifying the manifests, shall acquaint the captains or masters of vessels with the duties imposed on them by the present regulations, and specially with their duty of—

1. Expressly mentioning the packages or merchandise destined for transit, and those containing explosive or inflammable articles or goods.

2. Of making the declarations required in article 410, on the occasion of being visited or boarded.

3. Of delivering the lists and papers mentioned in articles 403, 409, and 410.

They shall also instruct said captains or masters that the aforesaid documents, as also the manifests, must be presented:—

1. To the visiting officer at the port of their destination.

2. To the local authorities of any port or place they may be forced to put in by distress or compulsion.

3. To the commanders of the revenue boats charged with the fiscal police of the coast and territorial seas of the empire.

They shall also certify in each copy of the manifest of having fully complied with this order, and that the captain or master of the vessel is fully aware of all these requirements; said consuls being liable to a fine of from fifty to five hundred mil-reis for each time they do not comply with said obligations, which fine shall be imposed by the Secretary of the Treasury, the chief of the respective department making known such non-compliances as soon as the manifests are sent to him.

ART. 408. No protests by the captain or master shall be admitted in the manifests of not being answerable for faults, additions, or differences, nor any doubtful declarations about quality, quantity, number, size, or weight of packages or merchandise he may have received or have on board.

ART. 409. The captain or master of a vessel must deliver to the naval officer, or to the visiting officer, on being boarded by him, the manifests, together with his charter-party, register, and all documents, bills of lading, and all other papers relating to his cargo that may be required of him, to be sent to the collector of customs or to the Administrator of the Board of Income.

Such papers are to be kept in deposit in the competent department, till they may be wanted for some other legitimate cause, and demanded by the respective captain or master.

ART. 410. On the same occasion of being visited, the captain or master of the vessel shall make or deliver in writing—

1. A list of any merchandise or objects he may have on board, not mentioned in his manifest, in consequence of having been received under sail, or for some other cause, specifying its quality, quantity, measure, or weight, marks, counter marks, and numbers, as also all the circumstances required in article 399.

2. A declaration of the merchandise or packages which, being mentioned in the manifest, he may have sold or discharged at any port he may have put in or called at, or that he may have thrown overboard for stress of weather, or that for any other cause may be wanting to make up the quantity manifested.

3. A list of passengers, and of the packages comprising their baggage, to be accompanied by a written declaration, signed by every one of them, of the contents of the packages belonging to each.

4. A list in duplicate of the remaining stores, provisions, and eatables which may be on board the vessel or kept as extras.

SEC. 1. A document mentioning everything shall be drawn up and signed by the visiting officer or officers, and by the captain or master to whom shall be given a receipt for the documents received.

SEC. 2. No undetermined declarations shall be admitted in said documents tending to justify irregularities or false declarations in the manifests, nor tending to attenuate the same.

ART. 411. Packages composing passengers' baggage shall be numbered and have tickets with owners' names written on. Immigrants may be exempt of such formality.

ART. 412. In the act of being visited on entering, the captain or master of a vessel, her passengers and crew, shall deliver to the *Guard-a-Mor*, or acting officer, who shall ask for same—First, the samples and small packages containing merchandise lying in the cabin, berths, and other places; second, the mails and letters for the post-office, said officer giving a receipt for everything he receives, or mentioning the same in the document drawn for such delivery, or in the roll or sheet of discharge.

ART. 413. During same or following day, but within the unprorogued or fixed time of twenty-four working hours, the captain or master shall appear before the collector, and there ratify declarations made at the time of the visit of entry; a document being drawn mentioning date of the entry, and all circumstances required by sections 1 and 2 of article 410.

ART. 414. Notwithstanding the dispositions of foregoing articles, it shall still be permitted to the captain or master of a vessel, when ratifying his declarations, as mentioned in above article, to make other declarations regarding increase

or diminution of his cargo, same to be in due time duly considered by the collector or administrator, and admitted or not, according to their nature and circumstances of the case.

ART. 415. The list of stores and provisions, when not delivered at the time of the visit of entry shall be delivered within forty-eight hours thereof, and in same shall be specified all stores and provisions in the vessel, or intended for the maintenance of her officers, crews, and passengers, specifying its quality, quantity, number, weight, or measure, marks, counter-marks, denominations, and number of unbroken packages, — only. In said lists shall not be comprised any objects not belonging to the service and sailing of the vessel, or to the maintenance of her crew and passengers; and any objects which, contrary to this disposition, are included in same shall be subject to double the consumption duties, or the duties having been paid, to a fine of fifty per cent of their value (article 471) according to judgment of the collector.

ART. 416. The want of manifest duly legalized according to present regulations, shall subject the vessel—at the option of the respective collector or administrator—to a fine of 500 reis to 2,000 for each ton measurement of the respective vessel, or one per cent on the duties the merchandise of her cargo may be subject to.

Are only excepted :—

SEC. 1. Vessels putting in in consequence of compulsion, referred to in chapter 2d of this section.

SEC. 2. Vessels which, putting in for same causes, and being condemned as unseaworthy, may sell at public auction part or the whole of their cargoes, in consequence of damages recognized by the competent department.

SEC. 3. Vessels putting in to refresh or recruit, and dispose merely of a part of their cargoes sufficient to defray expenses of the port.

SEC. 4. Fishing vessels, or coming from ports little frequented, where exist no Custom-house, revenue department, or any other manner of legalizing the manifests, according to article 401.

SEC. 5. All circumstances mentioned in foregoing section must be proved before the Custom-house at the port of entry.

SEC. 6. The landing of any package shall not be permitted, however, without previous exhibition by the captain or master of the vessel :—1st. A list, same as required in article 401, and all documents, cargo-book, and papers proving its exactness, if demanded. 2d. Payment of fine imposed, or bond for its amount.

ART. 417. The non-delivery of one of the copies of the manifest, or the tearing of the seal, or opening of the copy under cover, shall be punishable with a fine of from \$25 to \$50, imposed on the captain or master of the respective vessel.

ART. 418. Falsifying the manifest, or changing any sheets, making erasures or amendments to same after its delivery by the consular agent to the captain or master, shall subject the latter to a fine of from \$50 to \$300, besides any other penalties to be imposed on him as forger, according to penal code or criminal code.

ART. 419. The non-mention in the manifest, or in declarations permitted by articles 204 and 410, of explosive or inflammable merchandise, or similar mentioned in table No. 6, being on board, will give cause to the imposition of a fine of from \$20 to \$100 for each package, or 10 to 50 per cent of its value, according to judgment of the respective collector or administrator, which shall be paid by the captain or master of the vessel carrying them on board.

ART. 420. Absence of any of the formalities and declarations required for the regularity of the manifests, shall give occasion to the imposition of a fine of from \$50 to \$300 on the consul, consular agent, or Brazilian authority to whom its authenticity may belong.

SEC. 1. Said consuls, consular agents, or Brazilian authorities, shall incur on same penalties, if in the manifest or certificates are found any faults they ought to correct, or safeguard them, according to article 404, in case it is clearly seen said faults were not done after closed, enveloped, and sealed.

SEC. 2. If the want of formalities or faults are found in manifests not legal-

ized by Brazilian consuls, consular agents, or authorities, in consequence of being made in ports or places where said consuls or agents do not exist, the fine of foregoing sections shall be imposed on the captain or master of the vessel.

SEC. 3. If any formality, not essential, shall be wanting in the manifest, the collector of customs, or Administrator of the Revenue Board, having in consideration the cargo of the vessel, or any other circumstances in favor of the captain, may exempt him of the fines of anterior article.

SEC. 4. Are essential formalities of the manifest :—

1. Date and signature.

2. Legalization by the consuls, consular agents, local authorities, or persons mentioned in article 400, in manner ordered by article 401 and following.

3. Mention of packages or merchandise on board, with description of all signals or marks distinguishing them, and its quantity and quality, as per article 399, Nos. 4, 5, and 6.

4. Absence of corrections or alterations, erasures, interlinings, or any other faults, causing any doubt about declarations contained in same.

ART. 421. The collector of customs, or Administrator of the Revenue Board, each by himself, or by any of the officers under his orders; the Guarda Mor by himself, or by any of his aids, or by any officer under his orders, may proceed to any necessary searches, to prevent any embezzlement of the duties belonging to the public revenue, either at the time of the visit of entry, or at any other time, even within the term of twenty-four hours mentioned in article 414, whether during the discharging, after same is concluded, or when the vessel is still receiving cargo.

SEC. 1. If in such way, or at, or after the visit of discharge, it is found the vessel had on board more merchandise than mentioned in the manifest, declarations of her captain or master, made according to article 410, and list of extra stores and provisions, the excess shall be seized, and a fine imposed on the respective captain, or master, equivalent to two-thirds of the value of said merchandise, according to valuation of same in the tariff, or same, not fixing value, according to valuation given by experts, acting as per rules of chapter 3 of section 8.

This disposition applies to cases found out by means of search, when the merchandise is found packed in such a manner as to deceive, or found in hiding places of the vessel, or out of the hatches, or in any hidden place, or suspected of facilitating smuggling, or in the act of smuggling being effected. In case, however, of any excess being found by means of search, not intentionally done, or done without fraud being intended, the captain shall only pay the fine mentioned in following article, which is to be for the benefit of the officers making the search—dispositions of articles 120 and 758 being observed in all cases.

SEC. 2. Are excepted the packages. 1st. Of samples of little value. 2d. Merchandise, the duties on which shall not exceed \$10, and in this case, shall, or shall not, be imposed any fine, as the collector may deem of justice.

ART. 422. In case of excess of packages of merchandise not mentioned in the manifest being found out after the discharge into the Custom-house in the usual manner, a fine of from \$5 to \$100 shall be imposed for each package. If the excess is found in merchandise in bulk, and not subject to breakage, such as iron, heavy hardware, lumber, and others alike, the fine shall be of from 10 to 50 per cent on the value of the merchandise not manifested or found in excess. From the amount of any other fines of the present article, two thirds shall belong to the officer finding out the excess, on examining the manifest, or on the consumption entry, when it can be done so, and the remainder one-third shall belong to the public revenue.

ART. 423. In case the difference on the number of packages is for less than mentioned in the manifest, and the captain or master is unable to prove, to the satisfaction of the collector of customs, or Administrator of the Revenue Board, that the package or packages were not shipped, he shall pay, for benefit of the officer finding same, on examining the manifest, double the duties on the merchandise the packages not discharged ought to contain, said value being arbitrated according to declarations on the manifest, and as if the merchandise be-

logged to the superior quality, or by any other identical packages in same manifest, when declarations regarding package not discharged are not complete.

ART. 424. In articles imported in bulk, which are by their quality subject to excess or decrease, the fine shall be imposed only when the difference found amounts to more than 10 per cent. If the difference is for less, whatever it may amount to, no fine shall be imposed, provided duties have been paid on whole quantity manifested.

ART. 425. In soluble articles, such as ice, salt, and the like, the collector of customs may, at the petition of the master or captain, made in the act of entering at the Custom-house, allow an abatement up to 75 per cent on ice, and 25 per cent on salt, and others of equal nature, same to be ascertained by having the measurement of the cargo examined by experts of his confidence.

ART. 426. In case of a deficiency, or no presentation of a list of passengers and their baggage, the captain or master shall incur a fine of from \$50 to \$200.

SEC. only. He shall incur the same fine in not delivering a list of his stores, within the specified time, beside the same being at once subject to pay consumption duties, in consequence of such omission.

ART. 427. The captain, or master, shall incur in a fine of from \$1 to \$2 for each difference of mark, the same to be for the benefit of the officer finding the same, on examination of the manifest.

ART. 428. Men-of-war, and transports, whether national or foreign, must, on coming in, manifest at the Custom-house any cargo on board, or that they have none on board, or baggage of passengers, the same as merchant vessels; and on failing to deliver the same to the said fiscal department, shall be subject to the same exams and fiscalization as merchant vessels, in everything regarding cargo on board; and any act on their part contrary to this disposition, shall be reported to the supreme authority, that he may act as deemed more convenient.

ART. 429. The vessel shall be considered as mortgaged to the payment of any fines imposed by the Custom-house on her captain or master, in consequence of these regulations, and she shall not be cleared to leave port, until same are paid, or their amount is deposited.

SEC. only. This disposition is applicable to any package or merchandise on which fines are imposed, which cannot be entered and delivered before payment of fines is effected.

ART. 430. Are subject to dispositions of article 421. Any vehicles of transport, or animals of cargo, carrying merchandise of any quality from foreign countries across the territorial frontiers of the empire, the competent manifests are to be delivered at the fiscal port, or nearest station, and are to be made out according to article 33, and following of regulation No. 2,846, of 29th September, 1859, or according to any other special regulations or instructions to be framed in future, under penalties specified in said regulations and special instructions relative to the territorial frontier.

ART. 431. The penal part of this chapter, relating to captains or masters of vessels, shall be executed only after publication of the duties of said commanders, and requisites for the manifests are made at the foreign ports or places they sailed from; it being the duty of the respective consul, consular agents, or Brazilian authorities, to acquaint said captains of their duties; and having done so, he shall certify in the manifest, in the manner and under penalties of article 407.

SEC. only. Whilst, however, said publication does not take place, the dispositions and regulations at present in force regarding this subject, shall be considered as binding.

ART. 432. The manifests and certificates to vessels sailing from ports of the empire, whatever their destination may be, shall be made out in manner prescribed in article 399 and following, and shall be legalized by the collector or administrator of the competent fiscal department.

SEC. 1. Said manifests shall be made out in duplicate, and from the respective clearances, permits and bills of lading, which shall be adjoined to said manifests, after being numbered and signed, and its number being mentioned in the manifest. One of the copies shall be closed and sealed with the department seal, and delivered to the respective captain or master; the other shall be filed.

SEC. 2. In same manifests shall be mentioned, in separate place, the foreign merchandise:—1st. That are re-exported, transhipped, or in transit. 2d. That have already paid consumption duties.

ART. 433. The dispositions in foregoing articles apply to coasting vessels coming from, or going to any port or place whatever, which shall be obliged to manifest their cargoes according to rules of present chapter.

SEC. 1. The captains or masters of said vessels shall be answerable for any infringement of present regulations, want of a manifest, or irregularity of same, and differences for excess or diminution of cargo, and shall incur a fine of from \$20 to \$100 for want or irregularity of manifest, at the arbitrage of the respective collector or administrator.

SEC. 2. On being verified, any difference in excess of quantity manifested, a fine shall be imposed of from \$5 to \$100 for each package or merchandise.

SEC. 3. Any difference for less than quantity manifested shall give occasion to the imposing of a fine equivalent to amount of export duties.

SEC. 4. As regards irregularities committed by the authorities charged with legalizing the manifests, shall be observed the same as disposed regarding the consular agents, the fine being imposed at the capital by the Secretary of the Treasury, and in the provinces by the assistant treasurers.

ART. 434. The penal dispositions of foregoing article do not comprehend penalties for smuggling, nor any others incurred in for having received at sea, or in territorial seas of the empire, any foreign merchandise, contrary to dispositions of this regulation.

ART. 435. The manifests of coasting vessels coming from ports without Custom-house. Revenue Board, or Receiver of Taxes, shall be legalized by any authority of the place she sailed from, whenever the competent revenue department shall be situated at a distance of two leagues from aforesaid port.

ART. 436. Commanders of vessels are not answerable for contents of any package they carry.

SEC. only. Are excepted:—

1. Casks, the liquids of which have been substituted by any other different of that mentioned in the manifest, or by sweet or sea water, or by any other valueless object.

2. Packages showing signs of having been broken up or opened.

3. Packages of less weight or dimensions than manifested, or mentioned in bills of lading.

ANGELO MONIZ DA SILVA FERRAZ, Secretary of the Treasury.

Rio DE JANEIRO, September 19, 1890.

TABLE NO. SIX—HAZARDOUS AND CORROSIVE ARTICLES.

Sulphuric and nitric acids, or any other corrosives.

Spirits or essence of turpentine.

Alcohol and rum.

Gun cotton or prosciline.

Flambeaux made of mat weed, and others alike.

Burning balls, and other war materials of alike description.

Rosin, crude turpentine, tar, coal, ashes.

Brimstone in tubes, and sublimate of brimstone.

Percussion caps of every description.

Tow and oakum, flaming flax, gunpowder.

Rockets and fireworks of every description.

inder of every description.

Phosphor in cakes or tubes, in wooden or ware matches, or used in any other manner.

Pitch of every quality.

Saltpeter, nitre, or nitrate of potash.

Caustic soap, for soap making.

RAILROAD, CANAL, AND STEAMBOAT STATISTICS.

RAILROADS OF CHICAGO.

The *Chicago Tribune* gives a statement of the resources for 1860 of the railroads centering in that city. The following table, compared with those of previous years, demonstrates the gratifying fact, that the lowest depth of depression has been reached. The earnings of nearly all our roads show a very handsome increase over those of the previous year. The tide has turned, and with good crops the increase will be as rapid and satisfactory as the decline was steady and discouraging :—

	1856.	1857.	1858.	1859.	1860.
Chic. & Mil....	\$650,000 00	\$522,731 92	\$204,186 15	\$188,100 41	\$170,995 19
O. & N. West...	187,803 67	429,805 89	890,319 68	898,858 01	667,751 66
G. & Chi. U....	2,456,044 80	2,117,904 97	1,547,561 23	1,864,009 66	1,462,751 80
Chi. B. & Quinc.	1,627,029 61	1,899,586 49	1,600,709 64	1,266,982 96	1,716,179 09
Chic. & R. Is'd.	1,751,704 60	1,681,101 57	981,780 00	984,110 77	1,172,582 08
C., A. & St. L..	1,000,000 00	998,809 48	867,288 52	900,000 00	988,641 20
Ill. Central	2,469,583 67	2,298,964 57	1,976,578 52	2,107,381 95	2,664,848 87
P., Ft. W. & Ch.	1,478,428 76	1,652,727 95	1,567,780 18	1,965,121 18	2,335,085 23
Mich. S. & N. L.	3,114,756 06	2,186,124 97	2,039,846 97	1,738,149 30	2,131,293 89
Mich. Central...	8,128,154 10	2,656,471 86	2,016,185 85	1,756,420 80	2,029,070 62

Total. . . \$17,812,957 27 16,428,228 66 13,191,786 74 12,659,115 01 15,289,199 08

The table shows the very encouraging fact that the earnings of these ten trunk roads exceed those of last year by \$2,630,084 07.

RAILWAYS OF MASSACHUSETTS FOR 1860.

The Boston *Railway Times* gives the tables of the annual operations of the railways of Massachusetts, as reported officially to the Legislature. The figures are hereto annexed. The aggregates, as compared with last year, show as follows :—

	Capital.	Paid in.	Cost.	Income.	Debt.	Surplus.
1859....	59,495,200	48,809,507	63,318,848	10,101,381	17,536,381	8,427,082
1860....	62,976,400	49,184,915	62,718,998	10,583,232	17,732,008	8,929,962
Increase.	3,481,200	825,408	.....	481,901	195,622	502,880
Decrease	.....	.....	599,850	.....	.....	.....

The debt and capital paid in have both increased during the year; but the income shows an increase of more than 4½ per cent, while the expenses have undergone a diminution. The number of passengers carried in the year increased 406,105; the freight shows also an increase of 2 5,646 tons. Both these figures are a gratifying evidence of the recovery of business in the New England States. The business of the several roads was as follows :—

OPERATIONS OF THE RAILWAYS OF MASSACHUSETTS FOR 1900.

Length of main lines.	Names of railways.	Capital		Funded		Floating		Total Dividends		Receipts.		Of		Total.
		Cost.	paid in.	debt.	debt.	debt.	paid.	Surplus.	passenger freight.	mail & express.	Total.	roadbed.	miscellaneous.	
44.6	Boston and Worcester	4,738,441	4,500,000	6,269,530	47,584	6,317,114	47,584	86,000	559,980	451,543	1,389,521	73,704	96,596	546,183
136.0	Western Railway	11,029,079	5,150,000	197,518	111,691	209,209	6,269,530	412,000	690,991	1,101,118	34,910	197,100	526,453	988,065
8.6	New York and Boston (1) ..	360,017	292,068	97,500	607	98,507	8,600	.....	11,753	8,389	15,961	1,132	11,699	17,783
15.0	Agricultural Branch (2) ..	1,697,036	1,560,200	200,000	.....	200,000	195,000	45,057	150,419	229,689	10,414	54,895	49,432	195,814
48.4	Providence and Worcester ..	1,384,897	1,141,000	150,000	976	150,976	64,489	45,057	93,467	125,540	13,340	280,363	98,145	380,798
43.7	Worcester and Nashua	1,384,897	1,141,000	150,000	976	150,976	64,489	45,057	93,467	125,540	13,340	280,363	98,145	380,798
45.4	Fitchburg and Worcester	323,884	217,825	54,100	5,429	59,529	11,370	9,177	16,831	92,603	4,088	6,830	15,400	20,334
14.0	Amherst and Belchertown (2)	85,000	.....	.....	.....	.....	5,100	9,201	16,847	16,844	1,074	4,364	1,646	16,778
19.5	Connecticut River	1,801,943	1,591,100	330,000	.....	330,000	137,988	75,938	136,837	147,173	11,915	81,992	96,143	186,337
58.6	Pittsfield and North Adams ..	443,667	450,000	.....	.....	.....	27,000	.....	21,768	24,826	45,169	7,193	3,056	91,400
93.0	Hampshire and Hampden (1)	577,583	292,951	308,014	75,577	383,591	.....	.....	18,817	17,942	37,760	3,338	1,928	8,994
21.9	Stockbridge and Pittsfield (2)	443,700	448,748	.....	.....	.....	31,409	.....	18,817	17,942	37,760	3,338	1,928	8,994
9.7	West Stockbridge (3)	89,000	89,600	.....	.....	.....	1,788	630	.....	.....	1,854	.....	.....	1,854
47.0	Boston and Providence	3,160,000	8,160,000	169,790	.....	169,790	932,800	147,398	393,547	306,515	15,345	694,407	68,535	905,871
11.1	Taunton Branch	250,000	250,000	.....	.....	.....	90,000	54,812	81,630	73,193	1,200	156,019	8,008	19,099
20.1	New Bedford and Taunton ..	549,073	500,000	.....	18,640	18,640	53,000	24,109	53,568	44,599	9,998	126,585	19,483	14,115
4.0	Stoughton Branch (7)	99,652	85,400	.....	.....	.....	4,839	3,000	9,837	13,544	69	38,990	.....	39,089
3.8	Eastern Branch (8)	55,894	49,383	.....	.....	.....	3,000	463	3,060	12,960	69	6,949	716	7,116
8.3	Middleboro and Taunton	153,942	145,401	.....	7,800	7,800	.....	1,168	11,420	13,963	713	28,094	2,178	1,196
13.6	Providence and Fitchburg (9)	445,166	437,917	8,500	.....	8,500	.....	.....	21,738	16,377	1,423	29,333	6,060	7,455
16.1	Falmouth Branch	400,003	234,157	.....	.....	.....	.....	.....	24,015	10,930	2,199	47,444	4,365	6,908
79.6	Old Colony and Fall River ..	3,484,164	8,015,100	107,000	76,500	183,500	108,908	701,697	401,511	34,473	14,123	615,406	77,069	61,648
3.2	Dorchester & Milton Br. (10)	136,789	73,340	36,900	11,835	48,735	.....	.....	59,503	5,917	900	59,870	5,335	3,700
11.5	Cape Cod Railway	501,592	249,885	180,000	2,391	182,391	.....	19,941	84,498	20,699	15,991	25,713	39,499	47,639
48.0	Fitchburg Railway	1,031,625	6,116,291	168,400	11,538	179,938	.....	904,644	230,973	32,998	9,900	692,863	88,213	64,904
60.9	Vermont & Massachusetts	3,540,000	2,540,000	.....	.....	.....	219,400	904,644	68,776	133,358	10,715	211,890	25,511	35,404
6.6	Lexington & W. Cambridge ..	3,968,415	2,214,325	1,003,925	.....	1,003,925	.....	.....	12,656	5,419	466	18,537	3,107	1,551
2.9	Macbride & Fitchburg (11)	521,257	541,200	.....	.....	.....	8,600	51	.....	.....	8,571	.....	.....	8,571
96.7	Boston and Lowell	2,429,592	1,830,000	440,000	3,653	443,653	137,339	358,132	176,469	345,305	6,780	563,494	85,973	59,883
14.5	Nashua and Lowell	634,603	680,000	.....	.....	.....	4,000	107,772	97,865	150,769	8,919	251,638	97,945	23,894
12.8	Lowell and Lawrence (12) ..	368,158	500,000	76,000	19,916	95,916	.....	.....	.....	.....	.....	.....	.....	.....
16.9	Salmon and Lowell (13)	419,380	243,305	226,900	340	227,240	.....	9,819	.....	.....	.....	.....	.....	.....
13.2	Stony Brook Railway (14) ..	567,383	407,800	.....	.....	.....	17,374	608	.....	.....	.....	.....	.....	.....
74.3	Boston and Maine	4,371,416	3,076,974	.....	92,780	92,780	834,556	588,732	570,166	373,646	9,783	958,335	38,143	75,154
44.1	Eastern Railway	4,450,410	2,953,400	1,045,500	.....	1,045,500	.....	944,407	521,194	147,776	58,143	60,587	523,490	874,150
19.9	Keosauqua	147,008	299,107	.....	197,438	197,438	.....	.....	.....	.....	.....	.....	.....	.....
27.0	Newburyport Railway	394,404	224,540	231,000	204,930	435,930	.....	.....	10,714	62,498	792	10,714	8,778	30,508
53.6	Chesham Railway	2,073,552	9,165,926	859,900	27,340	887,140	.....	.....	108,716	106,300	7,500	817,366	93,895	83,773
59.4	Norwich and Worcester	2,612,694	2,192,542	630,600	23,968	654,568	.....	.....	131,814	293,216	6,640	834,980	42,341	108,183
1,980.7	Total	60,107,894	45,464,566	18,998,858	1,380,112	20,378,970	2,371,799	12,871,962	4,800,816	4,888,905	192,263	9,936,391	1,193,339	960,669

	P. ct. of expense of to divi- income.	P. ct. dend.	No. of miles run.	Passengers carried in the cars.	No. of passengers carried one mile.	Tons carried in the cars.	No. of tons of merch'dise hailed one mile.
Boston and Worcester.....	53.8	8.0	525,954	1,601,013	94,979,394	352,499	12,619,150
Western Railway.....	54.3	8.0	1,114,091	617,892	25,352,619	505,547	48,311,064
New York and Boston.....	0.0	0.0	24,428	137,848	717,952		
Agricultural Branch.....	6.0						
Providence and Worcester.....	50.0	8.0	221,598	723,183	6,241,890	173,309	5,515,405
Worcester and Nashua.....	55.0	6.0	189,853	170,513	3,189,870	110,315	2,480,020
Fitchburg and Worcester.....	72.0	6.0	87,494	54,635	647,136	38,158	481,857
Amherst and Belchertown.....	79.9	6.0	18,600	17,191	248,910	10,228	152,408
Connecticut River.....	48.1	8.0	195,026	320,801	4,115,357	117,460	2,788,817
Pittsfield and North Adams.....	44.5	8.0	83,160	87,676	718,172	27,288	422,945
Hampshire and Hampden.....	42.8	0.0	48,248	83,484	409,255	18,567	380,878
Stockbridge and Pittsfield.....	7.0						
West Stockbridge.....	4.5						
Boston and Providence.....	49.3	8.0	374,245	1,093,394	14,048,928	274,634	8,472,495
Taunton Branch.....	82.1	8.0	50,083	182,880	1,304,578	51,644	540,515
New Bedford and Taunton.....	77.8	5.0	49,241	118,917	1,595,592	45,746	464,521
Stoughton Branch.....	8.0		5,039	81,296	248,044	30,108	74,943
East-n Branch.....	6.0		4,693	21,114	91,456	10,376	41,512
Middleboro' and Taunton.....	89.9	0.0	26,716	20,664	179,584	12,907	81,738
Providence, Warren, and Bristol	66.0	0.0	25,859	100,083	1,091,069	4,919	55,771
Fairhaven Branch.....	0.0		37,814	54,676	638,419	15,365	221,900
Old Colony and Fall River.....	50.8	6.0	413,017	1,122,279	16,430,160	297,765	7,073,048
Dorchester and Milton Branch..	0.0						
South Shore Railway.....	71.9	0.0	23,529	138,368	800,448	2,462	24,862
Cape Cod Railway.....	62.8	0.0	77,522	99,802	2,276,122	44,478	533,398
Fitchburg Railway.....	57.0	6.0	837,451	754,830	11,398,460	398,008	9,837,045
Vermont and Massachusetts.....	64.9	0.0	101,326	91,827	1,950,187	78,154	1,785,089
Lexington and West Cambridge.	71.8	8.0	16,898	124,936	540,774	27,622	61,182
Marlboro' and Feltonville.....	12.0						
Boston and Lowell.....	65.6	7.5	888,977	705,483	8,752,648	449,385	7,943,855
Nashua and Lowell.....	71.8	8.0	174,511	816,983	3,982,847	201,852	3,424,094
Lowell and Lawrence.....	6.0						
Salem and Lowell.....	1.0						
Stony Brook.....	6.5						
Boston and Maine.....	54.1	8.0	630,863	1,893,185	28,753,129	293,749	8,309,687
Eastern Railway.....	50.9	0.0	487,296	1,460,658	22,880,318	128,566	3,214,054
Essex Railway.....	80.0	0.0	55,946	84,799	778,402	46,872	865,863
Newburyport Railway.....	84.6	0.0					
Cheshire Railway.....	66.5	0.0	265,941	72,021	2,923,941	111,906	5,740,527
Norwich and Worcester.....	56.8	0.0	292,010	174,550	3,480,410	125,968	5,892,936
Total and averages.....	55.2	5.15	6,170,963	12,830,598	190,998,587	3,912,379	132,552,724

- (1) Equipment furnished and road operated by Goss and Munson.
- (2) Operated and kept in repair by the Boston and Worcester Railway Company.
- (3) Sold at auction by act of 1856 to the bondholders, and operated by the Amherst, Belchertown, and Palmer Railway Company.
- (4) Leased to the New Haven and Northampton Railway Company, and operated by the New York and New Haven Railroad Company.
- (5) Leased by the Housatonic Railway Company at 7 per cent.
- (6) Leased by the Berkshire and Hudson and Boston Roads.
- (7) Operated by the Boston and Providence Railway Company.
- (8) Operated by the Boston and Providence Railway Company.
- (9) Engines and cars furnished by the Boston and Providence Railway Company.
- (10) Operated and kept in repair by the Old Colony and Fall River Railway Company.
- (11) Operated by the Fitchburg Railway Company.
- (12) Operated by the Boston and Lowell Railway Company.
- (13) Operated by the Boston and Lowell Railway Company.
- (14) Operated by the Nashua and Lowell Railway Company.

A NEW SYSTEM OF RAILWAY.

The Parisian correspondent of the *Morning Star* says:—"An experiment of a new system of railway was made at Compiègne some few days ago, and met with the greatest success among the agricultural speculators assembled to witness it. The inventor is said to be a poor wheelwright, whose ambition has not extended beyond that of facilitating field labor. This railway consists of a series of rails, fitting one in the other, like a succession of ladders laid flat upon the ground. Over these the carts roll quietly along, let them be ever so heavily laden. One great advantage of the system is, the facility with which the rails are laid down and taken up. In one hour a hundred metres may be planted. The tedious carting of crops through wet and muddy fields is hereby avoided. The experimental rail was 75 centimetres in width. The carts filled with produce, whether pushed or drawn by one single person, were of one cubic metre, and moved with the greatest ease."

POPULATION OF THE UNITED STATES.

The following table presents the official aggregates of all the census returns since the formation of the government. The rate of increase in the last decade has been, to a considerable extent, increased by the large immigration that has taken place:—

	1790.	1800.	1810.	1820.	1830.	1840.	1850.	1860.	population, 1860.	Old.	New.	Free.	Slave.	Apportionment of representatives.
Alabama.....	.....	.....	.....	137,901	869,897	599,756	771,693	955,917	599,444	435,473	7	6	17,440
Arkansas.....	.....	.....	.....	14,373	80,888	597,574	890,887	440,775	831,710	109,063	9	3	15,086
California.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3	2,897
Connecticut.....	293,141	251,092	262,042	275,992	297,615	300,793	370,792	384,770	384,770	.....	4	4	76,957
Delaware.....	69,068	64,373	72,674	72,749	76,748	76,053	92,597	112,353	110,549	1,805	1	1	.....
Florida.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
Georgia.....	84,548	102,101	352,433	840,867	316,693	691,392	906,173	1,053,797	615,356	63,809	8	7	1,415	
Illinois.....	.....	.....	12,383	35,311	137,445	476,158	905,416	1,067,404	1,067,404	.....	9	13	81,435
Indiana.....	.....	4,975	24,390	147,178	342,031	683,866	983,416	1,370,862	1,370,862	.....	11	11	90,992
Iowa.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	6	32,932
Kentucky.....	73,077	320,935	406,611	964,317	687,917	778,998	982,406	1,082,069	982,062	225,992	10	8	50,199	
Louisiana.....	.....	.....	76,556	153,407	352,411	517,769	666,431	854,943	813,186	.....	4	4	44,435
Maine.....	96,540	151,719	258,763	398,335	899,453	501,793	583,169	619,958	619,958	.....	6	5	32,932
Maryland.....	319,738	341,648	380,046	407,350	447,040	476,019	583,034	731,565	646,173	85,398	6	6	110,494	
Massachusetts.....	378,717	435,945	473,040	523,897	610,408	737,699	994,514	1,231,494	1,231,494	.....	11	10	60,511
Michigan.....	.....	.....	4,768	8,896	81,689	313,867	397,654	764,391	754,391	.....	4	6	117,856
Minnesota.....	.....	.....	.....	.....	.....	.....	6,077	172,793	172,793	.....	9	1	43,412
Mississippi.....	.....	8,850	40,358	75,448	136,691	375,651	606,696	887,158	407,551	479,607	4	5	56,400
Missouri.....	.....	.....	90,845	140,455	383,703	692,044	1,901,909	1,063,580	1,063,580	.....	7	9	9,533
New Hampshire.....	141,869	123,763	914,360	944,161	969,398	884,574	317,976	398,073	398,073	.....	3	3	71,310
New Jersey.....	184,139	211,949	945,535	977,875	320,823	373,306	489,555	676,064	676,064	.....	5	6	88,179
New York.....	840,190	586,756	959,049	1,872,813	1,918,606	2,439,981	3,097,394	3,851,563	3,851,563	.....	33	30	80,123
North Carolina.....	302,751	478,163	555,500	668,839	787,967	758,419	860,039	1,008,343	679,965	328,877	8	7	113,704	
Ohio.....	.....	45,365	290,760	381,434	947,903	1,519,467	1,980,329	2,877,917	2,877,917	.....	21	19	.....
Oregon.....	.....	.....	.....	.....	.....	.....	13,994	52,566	52,566	.....	1	1	.....
Pennsylvania.....	484,378	602,361	810,091	1,049,458	1,348,983	1,794,033	2,311,756	2,924,501	2,924,501	.....	25	23	193,119
Rhode Island.....	69,110	69,123	77,031	83,059	97,199	108,880	147,545	174,631	174,631	.....	9	9	47,340
South Carolina.....	949,073	845,591	415,115	509,741	581,185	594,896	663,507	715,371	308,196	407,185	6	4	49,972	
Tennessee.....	85,791	105,609	361,797	492,813	681,904	839,310	1,092,712	1,146,640	859,598	297,119	10	8	19,748	
Texas.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3	17,448
Vermont.....	85,416	154,465	217,713	325,764	980,659	991,946	314,199	600,955	415,999	184,966	9	4	61,965	
Virginia.....	748,308	880,300	974,623	1,065,379	1,211,405	1,439,797	1,593,199	1,907,378	1,907,378	408,858	13	11	131,068	
Wisc. main.....	.....	.....	.....	.....	.....	.....	80,945	768,485	768,485	.....	3	6	4,199
District of Columbia.....	.....	14,093	24,093	33,039	38,684	43,719	51,667	73,894	72,093	3,394	1	1	.....
Kansas.....
Nebraska.....
New Mexico.....
Utah.....
Washington.....
Dakota.....
Total.....	8,999,297	5,905,967	7,529,514	9,688,191	12,860,109	17,003,303	25,191,576	31,676,317	37,678,921	4,008,996	337	234

JOURNAL OF MINING, MANUFACTURES, AND ART.

FACTORIES OF LOWELL.--1836 vs. 1861.

Since 1836, the Massachusetts (and Prescott) Cotton Mills, and the Lowell Machine Shop Companies, have been organized, and the capital of the eleven other companies increased. We take from the *Lowell Courier* the following table, showing the progress of the manufacturing interests of Lowell at the two periods referred to:—

	1836.	1861.
Number of mills.....	29	54
Capital.....	\$7,650,000	\$18,900,000
Spindles.....	129,828	408,696
Looms.....	4,821	12,120
Females employed.....	5,414	8,405
Males employed.....	1,667	8,977
Total.....	7,081	12,882
Yards cotton cloth per week.....	839,800	2,481,000
Yards woolen ".....	7,800	82,000
Carpet ".....	2,500	25,000
Cotton used per week.....	263,000	823,000
Wool ".....	11,538	75,000
Yards dyed and printed.....	230,000	586,000
Tons anthracite coal per annum.....	9,453	30,400
Bushels charcoal per annum.....	.....	26,850
Cords wood per annum.....	4,690	.....
Gallons oil per annum.....	54,824	75,682
Pounds starch per annum.....	.....	1,631,000
Bbls flour per annum.....	.....	1,486

The Lowell Bleachery also dye at the present time 15,000,000 yards per annum, and bleach 8,000,000 yards in the same time.

COST OF MAKING IRON ON LAKE SUPERIOR.

At the Pioneer Works the iron is made on contract by B. Case, Esq., who furnishes everything except the coal, and delivers the pig (on board the cars, we think,) at seven dollars a ton, making the entire cost to the company sixteen dollars a ton, exclusive of the use of capital. The cost of transportation to this port is one dollar per ton, and hence to the Chicago market, the past season, it has been two dollars a ton, making a sum total of cost nineteen dollars a ton delivered at Chicago, where it has been disposed of at twenty-three dollars a ton, giving a net profit to the company of four dollars a ton. The single furnace now in blast produces fifteen to eighteen tons per day, which gives a return to the company on the capital invested of 60 to 70 dollars per day.

Mr. Gay, says the *Marquette Lake Superior Journal*, has furnished us the following schedule of the cost per ton of making iron at his two furnaces, located, the one at Collinsville, three miles from Marquette, and the other at Forestville, two miles above, on the same stream, both being operated by water-power:—

Cost of ore per ton.....	\$1 87½
Cost of freight on railroad per ton.....	1 62½
Cost of hauling ore to stacks, and iron back to railroad.....	1 50
Cost for flux.....	0 25
Cost for labor.....	2 00
Cost for coal.....	7 50
Cost for railroad charges, hauling pig to dock, per ton.....	0 25
Cost for dockage.....	0 25
Cost on board.....	\$15 25

Mr. Gay has sold his iron the past season, delivered on the dock at this place at twenty dollars per ton, which leaves a balance of \$4 75 per ton in excess of the cost of manufacture. The capital invested in the Collinsville Furnace is \$13,500, the interest of which, at seven per cent, would amount to about thirty-three cents a ton, leaving to the manufacturer a net profit of \$4 42 per ton. The cost of the upper furnace was something less, about \$12,000. Each furnace will turn out, with an ordinary run of luck, at least 3,000 tons per annum, and of course the product of the two would be 6,000 tons per annum, and might be considerably more.

THE BOOK TRADE.

1.—*Elsie Venner*. By O. W. HOLMES. Boston: Ticknor & Fields. New York: D. Appleton & Co.

Dr. Holmes has given us another very clever book, the most complete as a story, we think, of all his works. His *Autocrat* was thoroughly racy and original; every sentence was capital in itself, and many of them ought to have been left by themselves; the slender story upon which they were threaded, was too small a string for such big beads. The Professor was an improvement upon the *Autocrat* in this respect, but still there was a preponderance of sauce over pudding. In *Elsie Venner*, the proportionate relations of style and substance are more carefully adjusted, and therefore we have, not, perhaps, the author's cleverest writing, but his most successful effort at book-building.

There is decidedly more of a plot to this than to his other books; the story is told in the most charming manner, and the moral is, "judge not, that ye be not judged." The inevitable schoolmistress, Dr. Holmes's pet delineation, appears in the person of Helen Darley, a character so full of gentleness, and truth, and Christian grace, that we hope to find her again in every book he ever writes. The hero we have not fallen in love with yet. The Yankee portraits are delectable, Mr. Silas Peckham being an "institoot" *per se*. Old Sophy, the black nurse, is a failure; she is strictly a Kilkenny negro, and Dr. Holmes himself commits a little Hibernicism in making her say for children, "childer," pure Celtic, instead of "chillen," the invariable darkie pronunciation. This, however, is the smallest of small maculæ, and were it the only one, would be insufficient to mar the effulgence of the production.

But while we admire excessively the sparkling style, the bits of tender pathos, and the immensely varied knowledge which has been displayed for our enjoyment, we must enter a protest against the "grave scientific doctrine" upon which the story is based. The simple fact of the existence of birth-marks has been widened into a great curse, exceeding the curse of Cain. That such of our readers, as have no time to examine the book for themselves, may gain a faint idea of it, we give the merest outline of the heroine's history and characteristics.

Her parents live upon the southern side of a steep mountain, almost under a bare, rocky projection, called the Rattlesnake Ledge, because it is infested by these reptiles. One day in July, Mrs. Venner is bitten by a rattlesnake, and

when Elsie comes into the world, two months after, she bears around her neck a hideous birth-mark of the creature. The mother lingers for a few weeks; and then dies, and the snakey baby lives. She has little, piercing black eyes, inhuman in their coldness and their glitter, and with them she can fascinate whom she chooses, and bring them to her side. Of all her baby toys, she likes her rattle the best. When she begins to creep, she wiggles along in a wavy line; as soon as she has cut her teeth, her wet-nurse dies suddenly; when she learns to talk it is with a shockingly suggestive lisp. Some one tries to impart to her the elements of religious instruction, by an account of Eve's temptation; she likes the serpent, and says Eve is a good woman, which appears to deter the instructor from further efforts. She becomes daily more uncontrollable, and hates every one but her father and old Sophy. Her governesses are all afraid of her, and cannot be induced to remain in the house; one of them has a strange violent illness, whose origin no one knows. She has a cousin Dick, whom she loathes; one day she bites his wrist, and the doctor burns out the wound as he would the bite of a mad dog. Elsie chooses strange dresses for herself, of dull colors, and striped or barred patterns; she wears sharp glittering diamonds to fasten her collars, and for bracelets, enameled scales, and golden asps with emerald eyes. She twists up her hair in such a way as to make it look like a coil of serpents. She writes in a long slender hand on wavy, ribbed paper, and dances wild, bending, swaying dances, to the sound of castanets. She likes pictures of the Laocoon and the Brazen Serpent. Often at night she wanders off to the ledge, and sleeps among the rattlesnakes;—the white ash is supposed to be obnoxious to them, and she faints at the sight of it. She never laughs nor cries; her hands are clammy to touch, and when she is angry, she narrows her eyes, and lowers her brow, till her head looks flattened.

At eighteen she falls in love, as much as a snake can, with her school teacher—Dick says the teacher is not a gentleman, and Elsie tries to poison him, by way of retaliation. The young master does not return her love, although she asks him to; whereupon she falls into a low fever, exists without sustenance for a long time, like a gorged snake, has a final gleam of humanity, and dies. Dr. Holmes says, in his preface, that he does not pledge his own belief in this "doctrine," to the extent that is implied, but we doubt whether any author can so throw off the responsibility of what he writes. The schoolboy excuses his blots to his teacher by the asseveration that "twant him; 'twas his pen!" but we are not prepared to accept similar apologies from men like Dr. Holmes. He does not believe the possibility of his own story—he knows he does not; and there is another thing he knows, too, which he must not forget. That is, that we, who read what he writes, are not all of us as clear-headed, and calm, and wise as he may be. All of us are imaginative at times; many of us are nervous; some of us have not the vigorous mental faculties which he might charitably ascribe to us; a few of us, perhaps, are embarrassed with a burden of folly, which we would gladly shift upon other shoulders.

We have heard of people's laying their sins at their father's door, or even at the threshold of remoter ancestry, and there may be cause for it; but to deposit them calmly upon the backs of their great-aunt's silk-worms, or their grandfather's pet lizard, or upon the ophidia of their grandmother's native land, is rank injustice to reptiles, and slightly at variance with the popular impression of man's accountability.

We know a very talented, but very wretched hypochondriac, who goes moaning through life, and who does his best to make others as miserable as himself. The gentlest remonstrance about his melancholy, elicits the fierce phrenological gnasher, "Sir! at the age of twelve, I feel down stairs and jammed in hope!" We know another forlorn creature, at the opposite end of the scale, totally unenlightened, but not wicked. Things have generally gone wrong with her; when they have not, she has gone wrong with them. She sits with her feet on the stove, and a stubby pipe in one corner of her mouth, and tells you, in the most hopeless drawl, with regard to every senseless error of her life, "I 'spect 'twas to be, or else 'twaaan't to be; if it *hadn't* have been to be, 'twouldn't have been; but 'twas to be, and so 'twas."

And thus, if we could be made to believe Dr. Holmes's "grave scientific doctrine," we might as well fold our hands at once, in mute despair, and sit down under the crushing conviction that our wills and destinies are tied up in a stout tangle of ante-natal influences, and that our business in the ocean of time, is, to drift—fatalism does not belong exclusively to Islamism—it is a weed that will grow in any soil—but in the "doctrine" before us we have not only the soil, but the seeds and the plants. We live in an age of violent progress, when beliefs and nations grow up in a night, and it is not impossible that by the time Dr. Holmes has finished his next book, pre-adventism will have become a creed, and the ante-natalists a united confederacy.

It seems to us that some of our best writers are carrying their zeal for originality to an unpleasant degree;—we feel obliged to them for taking so much pains to entertain us, but they overdo it; instead of interesting us more intensely, they repel us. Hawthorne *will* take freaks, and soar away into aerial heights, like an idle, summer-day kite, that has nothing better to do than to make graceful plunges among the clouds. Emerson is subject to paroxysms, when he is forced to dive into the bowels of the earth; you must borrow a miner's bucket to follow him, and when you arrive at his level, if the lamp in your cap can bring any forms out of the shapeless darkness around, you are uncommonly lucky. We excuse Emerson, "for 'tis his nature to;" we forgive Hawthorne, "for God has made him so;" but why Dr. Holmes should put on these little coquetties we cannot see. It is very disappointing in him, when all we want of him is to stand firmly on the broad earth, and tell us what he sees, and knows, and feels. With a mind so full as his, and a heart so open, and a tongue so silvery and enchanting, he can bewitch us all, without seeking for sub- or super-natural stimulants. We like him always, but best when he keeps close to nature, and if he were here, we would say to him, half in our own words, and half in his, "unless the two can be combined, don't be original, 'but be simply true!'"

2.—*Schonberg's Western Atlas*; embracing Railways and Stations, Counties, Townships, Cities, Villages, and Post-offices, and the last Census; also descriptions, geographical, statistical, and historical; in five parts. Royal octavo. New York: Schonberg & Co., publishers.

Invaluable as a reference for the merchant and tourist. The arrangement is at once comprehensive, and comprises a minute analysis of the organization of the States of Ohio, Indiana, Illinois, Michigan, and Wisconsin. The utility of the *Western Atlas* will be obvious to our business community, to whom we commend it.

The following is the section of the law of 1857 referred to in Mr. CHASE'S letter:—

SEC. 5. And be it further enacted, That on the entry of any goods, wares, and merchandise imported on and after the first day of July aforesaid, the decision of the collector of the customs at the port of importation and entry, as to their liability to duty, or exemption therefrom, shall be final and conclusive against the owner, importer, consignee, or agent, unless he or they shall, within ten days after such entry, give notice to the collector, in writing, of his dissatisfaction with such decision, setting forth therein distinctly and specifically his ground of objection thereto, and shall, within thirty days after the date of such decision, appeal therefrom to the Secretary of the Treasury, whose decision on such appeal shall be final and conclusive; and the said goods, wares, and merchandise shall be liable to duty, or exempted therefrom, accordingly, any act of Congress to the contrary notwithstanding, unless suit shall be brought within thirty days after such decision for any duties that may have been paid, or may hereafter be paid, on said goods, or within thirty days after the duties shall have been paid in cases where such goods shall be in bond.

Home Insurance Company of New York.

Office, No. 112 and 114 Broadway.

CASH CAPITAL, ONE MILLION DOLLARS.

ASSETS, 1st JULY, 1890, \$1,481,819 27.

LIABILITIES, 654,000 67.

THE OFFICERS & DIRECTORS herewith present to the Stockholders and Proprietors of the Company their FORTY-SEVENTH ANNUAL Exhibit of Assets and Liabilities, showing the condition of the Company on the 1st day of July, 1890.

THE HOME INSURANCE COMPANY continues to insure against loss by FIRE, and the dangers of INLAND NAVIGATION AND TRANSPORTATION, on terms as favorable as the nature of the risks and the real security of the insured and of the Company will warrant. LOSSES EQUITABLY ADJUSTED AND PROMPTLY PAID.

DIRECTORS:

Wm. G. Lambert,	Jon. Humphreys,	Alfred S. Barnes,	John B. Paul,
Geo. C. Hallam,	George Peckens,	George Bliss,	Belmont Mason,
Daniels N. Barney,	Wood A. Work,	How Locketwood,	Geo. J. Buchanan,
Lawrence Hopkins,	James Law,	Levi R. Morton,	Cyrus Vale, Jr.,
Thos. Messenger,	J. H. Frothingham,	Curtis Noble,	Wm. B. Foster,
Wm. H. Nelson,	Chas. A. Buckley,	J. B. Hutchinson,	David L. Boyd,
Chas. J. Martin,	Geo. H. Morgan,	Chas. P. Robinson,	P. H. Cassell,
A. P. Wilmersmith,	Cyrus H. Norton,	Amos T. Denig,	Levitt Roberts,
Chas. B. Bledsoe,	Thos. McNamee,	H. A. Huston,	Samuel B. Caldwell,
T. Watson Bull,	Richard Higson,	James Hoyt,	A. J. Wills,
Henry Morgan,	Oliver E. Wood,	Wm. Sangris, Jr.,	Wm. H. Townsend.
Levi P. Stone,			

ABSTRACT of the Fourteenth Semi-Annual Statement of the condition of the HOME INSURANCE COMPANY, of the City of New York, on the 1st day of July, 1890.

ASSETS.

Cash, balance in bank	\$66,555 21	Real estate, No. 1 Wall street,	65,000 00
Bonds and mortgages (being first lien on real estate worth at least 1,790,000)	920,002 08	Interest due 1st July, 1890, for which \$25,100 31 has since been received	27,000 20
Loans on stocks, payable on demand, (market value of securities \$190,950)	90,314 00	Balance in hand pertaining to and in course of transmission from agents on 1st July (of which \$9,975 06 has since been received)	38,573 53
Bank checks, (market value)	85,023 00	Bills receivable (for premiums on inland risks)	22,500 11
U. S. Treasury notes (market value)	100,573 00	Premiums due and uncollected on policies issued at office	1,000 00
New York City water bonds	10,000 00		
N. Carolina State bonds, (market val.)	9,000 00		
Massachusetts bonds, (market value)	10,000 00		
Tennessee State bonds,	17,000 00		
Total			\$1,481,819 27

LIABILITIES.

Claims for losses outstanding on 1st July, 1890	\$54,000 67
New York, 13th July, 1890.	CHAR. J. MARTIN, Pres't.
J. MILLTON SMITH, Sec'y.	A. P. WILLEMARTH, Vice Pres't.
JOS. MCGEE, Asst. Sec'y.	

Atlantic Mutual Insurance Company.

51 WALL STREET, Corner of William, NEW YORK.

INSURANCE AGAINST MARINE AND INLAND NAVIGATION RISKS
RESERVED CAPITAL, OVER \$2,500,000.

ASSETS, OVER SIX MILLION DOLLARS—VIZ:

Stocks of the United States, of New York, and of New York City Banks	\$2,567,000 00
Loans secured by Stocks, Bonds and Mortgages, and otherwise	700,000 00
Real Estate	200,000 00
Dividends on Stocks, Interest on Bonds and Mortgages and other Loans, Rndry Notes, Reinsurance, and other claims due the Company, estimated at	115,000 00
Premium Notes and Bills Receivable	\$, 121,000 00
Cash in Bank	100,000 00
Total amount of Assets	\$3,600,000 00

The whole profits of the Company revert to the insured, and the profits of each year are divided, upon the Premiums terminated during the year, and for which Certificates are issued, bearing interest until redeemed.

Dividend of Profits declared January, 1890, 25 per cent.

Total Profits for 17 1/2 years

Of which there has been redeemed by Cash

Profits remaining with the Company

"BY THEIR FRUITS YE SHALL KNOW THEM."

The Leading American Fire Insurance Co.

INTEGRATED

A. D. 1519.



CHARTER

Persepolis

THIS POPULAR, OLD, AND SUBSTANTIAL COMPANY OFFERS SUPERIOR INDUCEMENTS
TO ALL DESIRING RELIABLE INDEMNITY AGAINST RISKS OF

FIRE AND INLAND NAVIGATION:

Such accepted on Solvent Terms and Fair Rates.

NET ASSETS. \$1,989,021.29.

0145.1009

Vld. Cash, \$359,252.11—U. S. Treasury Notes and Stocks, \$208,239.57—State
 Stocks, \$247,150—City Bonds, \$115,000—R.R. Road Stock, (actual market value),
 \$94,350—Unimproved Real Estate, (worth) \$77,499.31—Mortgage Bonds,
 \$67,134.30—Miscellaneous Items, \$9,922.07. *Gross*, 2,180,189.38. *Off. Inv.*
 \$1,611,773.91.

18.09. The **Aetna** has

Paid over **\$14,000,000** Losses up to present service.

A PRESTIGE OF 41 YEARS' EXPERIENCE AND SUCCESS.

A Yearly Income about three-fold that of any other American Fire Insurance Company, the largest source of practical underwriters in the nation, handling and insuring all risks of fire, marine, and inland water, and all other risks, which the inexperienced and inexperienced

Its Organization, by Inspectors, Agents, Adjustors, and Managers. Wherever there is a fire insurance within any town or property owners, in nearly all the States of the Union, especially going out of the way to serve the public, by really keeping in the way, to protect their wealth with its watch and other good offices.

03-10-15

E. C. RIPLEY, President

T. A. ALEXANDER, Vice-Chair

TIGHE, K. BILAOV. SEP. 17.

J. B. BENNETT, Gen'l. Agent.

HEAVEN OFFICE - 171 Vine Street - CINCINNATI, O.

HUNT'S

MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

ESTABLISHED BY FREEMAN HUNT.

Price \$5 per Annum.

PUBLISHED MONTHLY.

Vol. 44.

MAY, 1861.

No. 5.

NEW-YORK, No. 61 WILLIAM ST.: WILLIAM B. DANA, PUBLISHER AND PROPRIETOR

**NEW
ENGLAND
MUTUAL**



**LIFE
INSURANCE
COMPANY.**

WILLARD PHILLIPS, President.

B. F. STEVENS, Secretary.

The last year was one of marked prosperity. Number of policies issued, 331 more than the year previous. Net income, \$449,000; an increase of \$98,000. The addition to the accumulated fund, \$234,000; an increase of \$121,000. The Company has paid during its existence (17 years) nearly a MILLION in Losses; almost a MILLION in cash dividends to policy holders; and have nearly TWO MILLIONS well invested to meet Losses. Economy, care in its risks, and prudent investments, characterize this Company. The Mutual Principle insures at the lowest possible rates; the surplus being returned dividends *pro rata* to all insured. Documents of an interesting character, showing the benefit of the Mutual plan, forwarded gratis, upon application to

**JOHN HOPPER, Agent and Attorney for the Company,
110 Broadway, (corner of Pine Street,) New-York.**

Notice to Subscribers to the Merchants' Magazine.

The undersigned, for three years Publishers of the **MERCHANTS' MAGAZINE**, have sold this work, and all our right, title and interest therein, to Mr. **WILLIAM B. DANA**, late of Utica, New-York, to whom only all letters, communications and remittances for the work should be addressed.

GEORGE W. & JOHN A. WOOD.

New-York, February 14, 1861.

Notice to the Subscribers to the Merchants' Magazine.

In assuming the publication of **THE MERCHANTS' MAGAZINE**, the undersigned gives notice to the subscribers that there will be no essential change in the features of the work. It will, however, be the object of the Proprietor, not only to sustain its previous character as a record of sound political economy and of commercial statistics, but to add the following desirable information:

I. A record of the proceedings of the Chamber of Commerce, New-York, and of the Boards of Trade at Boston and Philadelphia.

II. A monthly list of Marine Losses, showing the name of the vessel, where bound, names of owner, captain, &c., and amount of loss, whether total or partial.

III. A copious digest and careful examination of all important decisions in New-York and other States, in reference to Marine, Fire and Life Insurance, Commercial Points, &c.

IV. A monthly letter from London, giving a synopsis of current commercial affairs throughout Great Britain and Europe, with such other information as will render the work acceptable to its readers.

WILLIAM B. DANA,

Proprietor of the Merchants' Magazine,

61 WILLIAM-ST., CHAMBER OF COMMERCE AND UNDERWRITERS' BUILDING.

New-York, February 14, 1861.

Notice is hereby given, that **H. J. RAPHAEL**, of St. Louis, is no longer authorized to act as Agent for this Magazine, he having proved a defaulter to a large amount.

THE MERCHANTS' MAGAZINE.

Established July, 1839.

EDITED BY

J. SMITH ROMANS, (SECRETARY OF THE CHAMBER OF COMMERCE OF THE STATE OF NEW-YORK,) AND WILLIAM B. DANA.

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VOLUME XLIV.                      M A Y , 1 8 6 1 .                      N U M B E R V .  
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NOTICE.—Owing to the large space occupied in this Number by various Commercial Reports, several departments of statistics, with the usual Reviews of New Books, are necessarily postponed to our next Number.

THE MERCHANTS' MAGAZINE

AND
COMMERCIAL REVIEW.

MAY, 1861.

COTTON—COTTONIZED FLAX—FIBRILIA.

THE great manufacturing fact which stands head and shoulders above all other facts, and forces itself upon the attention of the observer, like the sun at noon-day, is that in sixty years the manufacture of cotton has grown up to employ in the United States and Western Europe 40,000,000 spindles in the production of yarn. Towards the close of the last century, one person operated one spindle; the machines of the present day, therefore, do the work of 40,000,000 spinners, and the attendant labor in the perfection of the manufacture employs 1,500,000 persons. To supply raw material for those spindles, there was last year produced in the United States 4,600,000 bales, and there was derived from India 573,000 bales; from Brazil, 106,000 bales; West Indies, 47,100 bales; Egypt, 158,000 bales; total, 5,484,000 bales. Of this quantity, 87 per cent. was from the United States, 10 per cent. from India, and the 3 per cent. from other countries. Of the value, \$300,000,000, the United States stood for 90 per cent. The demand for the material has grown in the double ratio of the increasing numbers, and the improving condition or the means of the people. The increased quantity annually required to meet the demand is now equal to the whole crop of but a few years since. It was recently stated before the Manchester Cotton Supply Association, that the number of spindles increased in Europe and America at the rate of 6,000,000 per annum. At the rate of 100 pounds of cotton per spindle per annum, there is required to supply these spindles 810,000 bales per annum, or a quantity equal to the whole United States crop of 1830. There are, then, these prominent facts:—1st. That in the present century, the demand for cotton has increased from comparatively nothing to, in round numbers, 5,500,000 bales per annum. 2d. That it now increases at the rate of 800,000 bales per annum, which would, in ten years, give a demand for 13,500,000 bales. 3d. Up to this time, nearly the whole increase in quantity has been supplied by the United States, also the only advance in quality. These facts have been growing in importance before the eyes of

manufacturers and statesmen during the last 25 years, and the most earnest attention has been directed to the means of insuring a future sufficient supply, but late events have given a new interest to this subject. The necessity of increased sources of supply is based upon the idea of growing dependence upon the Southern States. Those who reflect upon the matter will, however, observe that the question of dependence upon this or that country is altogether secondary, since, with the rail-road pace at which the demand grows, it will soon altogether exceed the capacity of even the Southern States to supply it. The question of drawing supplies from other countries has been earnestly discussed and vigorously acted upon during more than 30 years. Vast sums of money have been fruitlessly expended in the prosecution of these schemes. Disappointment has attended all. In the mean time, France and Western Europe have grown to demand more cotton annually than England required when these enterprises were first undertaken. The French, to meet the same difficulty, offered enormous prizes to produce cotton in Algeria. The produce was bought up at premium prices; the fabric formed from it was prepared with greatest care at Rouen, and ostentatiously paraded at the Paris Exhibition. All ended in unmistakable failure. Cotton of the American quality is said to grow in Africa, but industry of the American quality is in vain sought in that country. After considering all the accounts from that quarter, and comparing them with similar reports of 40 years' standing, we draw from them but little hope. The English have made Herculean efforts in India, but the results have convinced the most sanguine practical men that more Surat cotton only can be expected thence. One of the highest Manchester authorities concludes a valuable report as follows: "If India were to send us 2,000,000 bales of cotton per annum, the *desideratum* would not be supplied, and our perilous problem would be still unsolved. We should be as dependent upon America as ever." It has been sufficiently demonstrated, however, that the growth of cotton in India cannot be much increased, and China depends largely upon the India surplus. The efforts of the India Company have not been few or inefficient. In 1840 the Hon. East India Company sent an agent to the United States, with a *carte blanche* as to expenses. He engaged the services of ten experienced American cotton-growers, taken from the best cotton districts of the country. Several were taken from Mississippi, two from Louisiana, three from Alabama and two or three from Georgia. They were engaged at good salaries, and bound to remain in India five years each. They were supplied with large quantities of the best American seed, cotton gins, ploughs, hoes, cotton presses, and every possible appliance calculated to insure success. They passed through England, visited Manchester, and were made acquainted with the views and wants of the spinners. They were sent overland to India, and distributed in the best cotton districts to be found in that vast region. They were supplied with all the laborers they wanted at three cents per day each, they subsisting on rice as food. One of the planters, Mr. TERRY, stated that in Mississippi one hand could cultivate five acres, make five bales of cotton, and his own provisions. To do the same work in India, it required three weakly Asiatics to the acre. Mr. TERRY was sent up to the Bundelcund district, near the base of the Himalaya Mountains. When he first reached this locality, he planted, near the close of the rainy season, one thousand acres in cotton.

The plant came up, grew well, bloomed and balled favorably; but just at this stage in its growth the drought set in, the heavens seemed turned to brass, and not a drop of rain fell in ninety days. His plants withered, the leaves dried up, blossoms fell off, and the result was, that he only gathered 50 pounds of cotton to the acre, against about 1,000 to 1,200 pounds in Mississippi. This course was invariable during five years, at the end of which time the project was abandoned. The report of the Bombay Chamber of Commerce, contained in this magazine for April, 1861, contains some interesting matter upon this subject.

Mr. F., one of the American cotton-growers who went to India, and was stationed at Goruckpore, put two hundred acres in cotton, from which he gathered only two hundred pounds of clean cotton. The most those sent to Coimbatore could do was to raise, in a favorable year, two hundred pounds of seed cotton to the acre—equal to about fifty pounds of clean cotton. The most Mr. T. could do was to raise, the first year, ten pounds of clean cotton from American cotton seed of the Mexican variety, (the best,) and seventy pounds of native cotton to the acre. He says the American seed carried out from Rodney, (the best in America,) deteriorated every year; the staple or fiber growing shorter, while the yield grew less. It is his firm conviction that if the American seed be planted over and over again in the same soil, in India, in five years it will totally cease to mature any cotton whatever. He also says, by changing it to other districts, it may be made to yield something a few years longer but would ultimately run out.

The climate of India is an insuperable bar to the growth of the proper variety of cotton. Turkey (in Europe and in Asia Minor) has been spoken of by missionaries and others as a suitable place for the growth of cotton. Dr. DAVIS, of South Carolina, went to Asia Minor some years since, under the auspices of the Turkish government, to engage in its cultivation, and had every facility granted him of means and labor, such as it was, but the climate was too much for his experiments. Where he found a locality hot enough to grow cotton, there was not rain enough to render even grain or grass a reliable crop. The Jews in Syria were often subjected to famines for the want of rain, and "the early and the latter rains" were celebrated as blessings. The doctor failed, and returned with some interesting specimens of Eastern goats as mementoes of his experiments.

These were events of twenty years since, and they have been followed by numberless efforts at irrigation, and other enterprises in various localities, to produce the desired results, but always with the same result. It is to be borne in mind that this great American monopoly, which has been so overshadowing, has been the growth of sixty years. When we consider the vastness of the results, this appears to be a very short time in which to bring them about; nevertheless, if we are to look forward sixty years, as the period in which a rival is to be built up, what will be the state of the demand then? We have shown that this demand is by no means stationary, but proceeds at the rate of a large crop every year. The United States' capacity to produce is not now limited, but the limit must come, and the great question is, how will the future wants of the world be supplied, when the capacity of the South to produce cotton is reached? What rival can be built up that will be able to supply the increasing excess of annual demand over production? The United States crop in 1820 was 425,000 bales; in 1830, 870,415 bales; in 1840,

2,177,532 bales; in 1850, 2,796,706 bales; in 1860, 4,600,000 bales. The crop of 1840 sold at $8\frac{1}{2}$ cents per pound; and that of 1860, which was more than double in quantity, at $10\frac{1}{2}$ cents. In the last ten years the crop has increased $67\frac{1}{2}$ per cent., and will probably double in the next ten years; but still falling short of the demand. It is plain that a rival cotton-growing country cannot, in any reasonable time, lessen the importance of American cotton. Efforts have, however, been made in another direction, viz., to find a substitute for cotton. Flax would long since have rivalled it had it been adapted to machine spinning. That it has not been, has, it is alleged, been owing to the faulty manner in which it has been cured. This difficulty is now said to be so far overcome that flax comes in direct rivalry with cotton as a raw material. In relation to this interesting subject we quote from an address of STEPHEN M. ALLEN, Esq., before the Legislative Society of Massachusetts:

In the year 1854, I became fully satisfied that flax could be practically cottonized for working on the ordinary cotton machinery, and renewed my experiments in view of establishing factories for its manufacture on the Hydraulic Canal at Niagara Falls, in which enterprise I was then engaged. It was not, however, till the winter and spring of 1857 that I was enabled to complete my plans for a set of machinery which would secure the manufacture of the article on a large scale. The difficulties also attending the control and extraction of the glutinous matter cementing the fibers together, were quite extensive and perplexing; and it was with much satisfaction that in the spring of that year I sent off from Niagara Falls the first bale of tow to the bleachery of Mr. GEORGE W. BROWN, at East Greenwich, R. I., for further experiments on a larger scale. In 1858, machinery was set up at East Greenwich of such kinds as could readily be had, and which we supposed would meet our requirements; and during the summer a very good article of fibrilia was made, and used with cotton and wool in their respective branches of manufacture. These experiments convinced us that a moderate capital, judiciously employed, would produce an article of manufacture equal to cotton, the material for which could be raised in any northern climate; and that machinery could be adapted to the different stages of the growth and preparation of the raw material which would pay the farmer a suitable profit for his crop, and render his labor easier than on an ordinary crop of corn or wheat. Some difficulties arose in the working of some parts of our machinery, and particularly in the breaking of the straw and reducing the fiber to a proper length of staple, which were remedied by the use of an invention of Mr. STEPHEN RANDALL, of Centreville, R. I., to whom, together with Messrs. A. Sisson & Co., we are much indebted for the present perfect machinery we are now working. Mr. RANDALL has had considerable experience in the manufacture of flax, under the old method, and for many years has believed it a coming substitute for or co-worker with cotton. In the spring of last year the old experimental machinery, as well as a new set, was brought to Watertown in this State, and, through the co-operation of some enterprising and wealthy merchants of Boston, it was set up for a final test, before a large and suitable factory should be erected for the purpose of manufacturing flax or hemp on a large scale. These experiments were perfectly satisfactory, and the machinery is now in progress of construction for other mills in different parts of New-England and the West. Thus we are enabled to give to

the world, as we think, a new article of manufacture, much desired and needed at the present time, the fiber of which can be grown on any soil or in any climate—affording the agriculturist sufficient profit to induce him to cultivate it extensively, while the manufacturer and consumer will gain by its adoption.

It spins and weaves readily on either cotton or woollen machinery, mixed with either of those substances, in small or large proportion. The length of its fiber can be adapted to either cotton or wool, while the fabric thus made is stronger and more beautiful, and the cost is not increased.

The specimens which I present to you this evening compose many tests, both in spinning and weaving, and the proportions of flax in each are different. With the stockings, there is 25 per cent. of fibrilia, with 75 per cent. of fine wool; and the best judges pronounce the stockings finer, softer and better for durability than though of all wool. The satinet has 25 per cent. of fibrilia in the filling, the warp being all cotton. The jeans are 40 per cent. fibrilia, 40 per cent. cotton and 20 per cent. of wool. The yarns are half cotton and half fibrilia; while the prints are from 25 to 50 per cent. of fibrilia. It will be observed that they finish with a brighter color than those printed upon pure cotton cloth. One of these specimens was printed upon one of the first set of rollers or power-printing machines ever worked in this country; and to me it has an abiding interest, from the fact that its revolutions were familiar to my watch for two years of my early youth, between the ages of nine and eleven.

Flax was one of the first cultivated products of New-England after the arrival of the Pilgrims at Plymouth. The necessities for clothing, which were then almost wholly supplied from native flax and wool, led the first settlers to cultivate the plant with much care and success. The process, however, both of raising and manufacturing the fiber was the same as used in Egypt, Rome and Britain; and, in those early days, the supply was governed by the wants of each individual family, who, as a general thing, raised and manufactured what they needed within the limits of their own farms and cottages.

As early as 1638, three brothers, GILMAN, came over from England to enter into manufactures, and settled at Exeter, New-Hampshire. Two of them went back again for mill-gear, but were both lost at sea. The other remaining, reared a large family, who were intimately connected with the early manufactures of that State, and where their descendants have ever been prominent leaders in the progressive elements of the Granite State.

In 1718 a colony of Scotch-Irish came to New-England from Londonderry, in Ireland, and settled in New-Hampshire, naming their town after that from which they had emigrated in the old country. They were mostly manufacturers of flax at home, and soon set up the same business in the land of their adoption. They were more successful than any subsequent company organized for this branch of manufacturing, and in a few years their reputation was established as producing the best linen in America. As early as 1748, their fame in this branch of business was so universal, that the Colonial legislature provided protection for their goods from counterfeit, by giving them an exclusive stamp for their fabrics.

In 1760 there lived on the banks of the Merrimac a young farmer, a descendant of the before-named GILMAN, of Exeter, who was engaged, like many others throughout New-England, in the cultivation and manufacture of flax. At a later period, but before the Revolution, he had carried his work on to much success, and had become what was termed in those days quite "*fore-handed*." Even at that period the old process of manufacturing was used, and the rotting, and especially the breaking of the flax, was attended with great labor—all by hand-work. At Londonderry they carried their cloth to market on horseback, and it was no uncommon occurrence to see five or six of the girls of the neighborhood start off thus, each with a horse and pillion loaded with rolls of cloth, made by their own hands, and go fifty, seventy-five, and even one hundred and twenty miles, to Portsmouth, Boston and Springfield, to exchange them for family comforts not to be had in the country stores. When the business increased beyond the convenient limits of the farmhouse, it was removed to outbuildings raised for the purpose, and thus it was carried on. In time, a race was cut on the mountain-side, the stream was turned, and a mill established, which answered the double purpose of grinding grain and turning the flax-wheels. This march of improvement on the part of Col. GILMAN was received with much distrust by his neighbors. One of them offered to furnish all the flax spun in that mill gratis; another, doubting his ability to make water run in that ditch, which, to the eye, had the appearance of flowing up hill, said he would agree to eat all the meal as fast as it could be ground. The first linen-wheel moved by water-power in America, so far as I can learn, was established at this spot in 1795. About this time a new impetus was given to the business of manufactures, by mixing the yarn of flax and cotton together in colors, and thus producing by the loom a new article of homespun commerce. This process was quite successful, and was adopted by most of the flax manufacturers of New-England.

By accident, rather than design, a discovery was made in the mill, in a practical substitute for rotting the flax straw, by immersing it in the running water of the mountain stream. A bundle of flax-straw having fallen in, and remaining for some time, it was taken out in a supposed ruined condition, and handed over to the youngest daughter for experiment. It proved to make a finer linen thread than any before seen in their experience, and this fact led to further successful experiments, which led to the abandonment of the former rotting process altogether. In England this is done in pools, in which the water is stagnant. It was said that the water in this White Mountain brook was, in old times, very poisonous to animals, and that split-footed beasts that drank of it would not live two years, unless they were watered elsewhere; and this was attributed to an Indian curse. It has since been ascertained, from an analytical examination, that the water contained mineral properties, which were turned to good account in the rotting of flax.

The first attempts to prepare flax, so as to resemble cotton in appearance and texture, were made in Europe, upwards of one hundred years ago. Experiments were made by PALMQUIST, in the year 1745. We find in the Swedish transactions for the year 1747, a description of the method and agencies employed for the purpose; but they proved too tedious and imperfect for practical use. In 1775 Lady MOIRA prepared specimens from both hemp and flax fiber, so as to resemble cotton; which was

followed by the experiments of Baron MEIDINGEN, in 1777; by those of HAAG, in 1788; by those of KREUTZER, in 1801; by those of GOBELLI, in 1803; by those of STADLER, HAUFFNER and SEGALLA, in 1811; and by those of SOUKOU, in 1816. All the above experiments, together with those of a more recent date in Europe, have failed of a practical result.

Chevalier CLAUSSEN, in his experiments in 1851, electrified the manufacturing world by his announcement that flax could be manufactured, under his process, into a cotton suitable for practical spinning and weaving on the ordinary cotton machinery. His plan of treating the straw from which the fiber was obtained was: 1st. By steeping the fiber alone in a solution of caustic soda, or other solution of like properties, and then in a bath of a diluted sulphuric or other acid. 2d. By again submitting the fiber to the same bath, with the addition of fumes of sulphur. 3d. Saturating them with a solution of bi-carbonate of soda, or any other like agent, and then decomposing such salt, however such decomposition may be affected. 4th. By cutting the fiber into short lengths for spinning. 5th. By the mode of splitting the fiber by gaseous expansion. Mr. KNOWLES' process, though not technically the same, employs chemical means equally impracticable to produce a proper result.

Both of these processes failed from about the same cause. 1st. By the impracticable mode of treating the flax straw, by laborious and expensive chemical action, which would inevitably have to be done on the farm where the flax grew, thereby necessitating every farmer to become a chemist. 2d. By submitting the fiber to hot acids or alkalies, before a previous simple and more natural preparation, without which it can never be properly disintegrated or refined for spinning as cotton. 3d. By cutting the fiber as described in their patents, which, of itself, would spoil it, either for refining or spinning. 4th. By destroying the natural strength and beauty of the fiber, by unnatural, laborious and chemical processes.

The old theory that the fibril of flax was some twenty-four to thirty inches in length, instead of less than two inches, and that it was necessary that it should be rotted before it could be prepared for spinning, has led most of the manufacturers astray in past ages, and this persistency has led to the great expenditure in the manufacture of linen, which has followed it from century to century. A chemical examination of the cementing compound which holds the fiber together, one fibril overlaying another, like the shingle upon the roof of the house, each acting as a conductor from the air without to the lungs of the stalk within, would have proved that the process of fermenting or rotting the straw, or the fiber, or the boiling it with alkalies, would have entirely changed many of the constituents of that compound, and rendered them indissoluble, except at such strength as to injure the durability of the fiber.

In the process now in use in Europe for bleaching linen after it is woven, there is more labor and expense than in the production of the cloth before you, from the time the straw left the field to its present state. The difference in the natural construction of the cotton and flax fiber is very great; one is the covering of a seed, the other of the stalk to which it belongs. The cotton fiber has transmitted its glutinous compound to its seed, and is but a bleached skeleton of what it was; flat, like a ribbon, it coils in being torn from its position, and, as a conse-

quence, when ready for use, it presents an apparent serrated edge. The fiber of flax, on the contrary, is tubular, and as it lays upon its stalk, each fibril overlaps another, giving the appearance of one continuous thread. This tube is not destroyed in the process of manufacture, but, unlike cotton, retains both within and on the outer surface the lees of the oil and sap, which it helps transmit to the ripening seed while on the original stem. This, when dry, forms the cementing compound so hard to remove, which has baffled the manufacturer in past ages, and, in reality, has controlled the form of machinery in use for its manufacture. When dealt with naturally and simply, it is readily removed or controlled. It requires, however, both a mechanical and chemical process combined; neither will do it alone.

When the flax is nearly ripe in the field, it may be cut with an ordinary scythe or mowing machine, and should be cured like hay. Particular attention should be given to stacking or housing the straw as soon as properly cured. The seed may be threshed by an ordinary threshing machine, as it does not injure the fiber for our purpose by its becoming tangled. It should then be broken and scutched by RANDALL'S machines, and the lint thus saved, which had been reduced to a uniform staple, may be baled and sent to the factory. A brake and scutcher may be turned with much less power than the ordinary threshing machine, and one of each should be owned in every neighborhood where flax is raised to any extent. The seed will average from fifteen to twenty bushels per acre, and is worth about one dollar and fifty cents per bushel. The lint or tow yields from unrotted straw from five hundred to one thousand pounds per acre, and is worth, for making fibrilia or flax cotton, when properly cleaned, from two to four cents per pound.

Farmers at the West now raise flax for the seed alone, feeding the straw to their cattle, or throwing it away. If the production of the seed will pay the agriculturist for raising the flax, the saving of the fiber will make it one of the most valuable crops grown in the country. When the straw is broken in the manner before described, the shove or woody part remaining becomes a valuable food for farm stock. The seed will of course be sold to the oil-mill, but the oil-cake should be returned for consumption on the farm, which, together with the shove and flax-roots left in the ground, will reproduce in the soil, with other ordinary dressing, all that the previous crop has taken away. The manufacturer can pay the before-named prices for the raw flax or tow, and produce fibrilia in perfection for spinning, half and half with cotton, so as to compete with the price of cotton, as it has ranged the last five years. In such case the North could easily raise its own fiber for manufactures, as well as export the full amount of the present cotton crop of the United States for foreign consumption. The State of New-York could readily spare four millions from its thirteen millions acres of tilled land for such a purpose, and thus produce a crop sufficient to match the present cotton crop of the United States. Each State in the Union is now able to produce more pounds of fibrilia than is used of cotton, at the present time, in any State of the Confederation.

The Americans use more linen per head than any other nation, by a large proportion; and the sum annually expended for importations of this article is some \$15,000,000.

The world is now suffering for clothing, and it would take twenty-five

million bales of cotton per annum to supply the natural demand, if all could share equally in its distribution. This demand has to be supplied with less than six million bales at the present time.

Thus a new and improved character has been given to flax, and its use finds a corresponding demand with the manufacturer and the world. When the fiber comes from the farm and the brake, suited for cottonizing, we call it lentin, and the same can be cottonized wherever the machinery may be set up. Each spinning and weaving mill can add the necessary amount of machinery to work fibrilia, which, at the present time, can be used to the best advantage by mixing the same from one-quarter to three-quarters with cotton or wool. It improves the fabric of the cloth in either, if the proportions are suited to the article made. The process of cottonizing is simple compared to the old system of subduing flax. The first is what we call the soluble process, and consists in the proper extraction of the glumien which cements the fiber together, after which the same may be bleached or colored. The second is the mechanical process, which consists in separating the fibers which have been detached from each other by the soluble process, and reducing them to their original fibrils as near as may be, according to the length of staple required, which, for spinning, must be of uniform length. This is readily accomplished by the machinery for the purpose in connection with the soluble process, and the fiber is thus converted to a fine white cotton or wool, at a price below the cost of either, while it will spin or weave on either cotton or woollen machinery. The old method of extracting the glumien from linen after it was woven was a very tedious one, and cost more than the whole process of cottonizing flax under the new system. This, added to the great cost of preparing and spinning flax under the old method, accounts for the high cost of linen in use. The old process, according to a late English publication, is in thirty-six parts, occupying more than six weeks, and is as follows:

- | | |
|--|--|
| 1. Steeping 12 hours in cold water. | 18. Washed. |
| 2. The whole is then boiled. | 19. Exposed on grass from 2 to 4 days. |
| 3. Washed in pure water. | 20. Scald with soap. |
| 4. Boiled 12 hours in carbonate of soda, caustic lye, gumfustic, or resinous soap. | 21. Washed. |
| 5. Exposed on grass from 4 to 8 days. | 22. Rubbed. |
| 6. Boiled as before. | 23. Washed. |
| 7. Washed. | 24. Exposed on grass. |
| 8. Exposed on grass. | 25. Steeped in sulphuric acid. |
| 9. Boiled. | 26. Washed. |
| 10. Washed. | 27. Bleaching liquor. |
| 11. Exposed on grass. | 28. Washed. |
| 12. Steeped in vitriol, sp. gr. 1.02. | 29. Scald. |
| 13. Washed. | 30. Washed. |
| 14. Boiled. | 31. Exposed on grass. |
| 15. Exposed on grass. | 32. Steeped in sulphuric acid. |
| 16. Scald. | 33. Washed. |
| 17. Soaped and rubbed. | 34. Bleaching liquor. |
| | 35. Washed. |
| | 36. Dried. |

This great cost arises, as a matter of course, from the tedious mode of treatment which has been pursued in the preparation of flax for the last three thousand years: 1. The pulling, rippling, rotting and breaking process has been quite too expensive and troublesome to the farmer to enable him to make a large or profitable crop. 2. The use of the fiber

in long line before the glumien was extracted, which made it so harsh and hard that it could not be controlled by pressing and spinning without great labor, and the use of warm water to soften the fiber as it passed to the spindle. An entire disregard of the character of the glumien or cementing compound seems to have been had, as well as to the natural fibrils of the flax plant, which are only from one to two inches long, and which form the long fibers used in the long line process of manufacture. This cementing compound is composed of many conflicting elements, which will not, as a whole, bear any one specific treatment, and produce the general object desired. For instance, the boiling the fiber at first is sure to set or coagulate the albumen which forms one part of the glumien in the fiber; and the same can never after be solved by any simple process. Like the white of an egg, the longer it is boiled the harder it grows. Again, the gluten, which forms another part of this compound, cannot be solved after it has been boiled in alkali, but is precipitated, a dry and hard substance, on the external tube of the fibril, which is ever after difficult to manage. Many of the other ingredients of the cementing compound are subject to and are affected by the same laws; and hence the treatment as a whole has never been according to nature. The dew-rotting process itself produces some of these evils in the fiber, and should be avoided as much as possible.

The present process is very simple in both the soluble and mechanical departments, and is according to nature. By the use of one of RANDALL's brakes, the farmer can send his fiber baled to market cheaper than he could raise, pull and rot the straw in the old way, to say nothing of the saving of the shives for fodder, and the value of the roots left in the soil for dressing. The manufacturer can cottonize the fiber, as before-mentioned, at far less cost than is expended in the old bleaching process, while the system is one simple in itself, and follows the natural laws of its character throughout. The old process, in all respects, has been laid aside. Even the attempts at cottonizing the fiber which have been made this last century have been found valueless in a practical sense.

Fibrilia can be made from hemp, jute, china grass, and many other fibers; the character of the minute fibrils in each being about the same for spinning, though the cost and character of the article will vary some in each case. Some of the common weeds and shrubs which grow plentifully in all parts of the country make a good fiber for spinning and for paper, and there is every reason to suppose that they may yet be brought into practical use. A very good fiber may be made from the stalk of the cotton-plant of the South; but experience has not proved the certainty and value of the production. Hemp of itself can be made more valuable for this purpose than for any other, though the plant must be prepared for use like flax, before it has been rotted under the old process. The fibrils of all these plants are tubular like flax and wool.

The fiber of flax, as well as the present manufacture of linen, is entirely different from that of cotton. The mechanical structure of the cotton fiber is flat and ribbon-like, with the appearance under the microscope of having small openings between the fibrils like net-work. These fibers become coiled when torn from the seed which they cover, and hence have had the appearance, when laid between the discs of the glass, of a serrated edge. It is white. The oil and sap, or any coloring matter that pervades the fiber in its younger or greener state, becomes absorbed by

the ripening seed, leaving it bleached and dry, when in a state to gather for market. The natural length of the fiber is from one to two inches. The ginning process, which in a measure separates the seed from the fiber, does not entirely clean it; and when it comes to the mill, various processes are resorted to, occasioning a loss of some ten or fifteen per cent., to bring it into a condition to spin. The porous structure of the fiber opens it to the action of acids, alkalies or vaporous influences, which cause a more rapid decay than in flax, whether used in thread or cloth. Its body, unprotected by resinous or glutinous substances, which would cause it to mingle with interlacing strands of parallel filaments, falls quicker to decay than those fibrous substances of the nature of flax, which, in every stage of manufacture or wear, become more and more cemented together. Color, attaching itself to the cotton fiber more by external attraction and cohesion than in tubular fibrilia, does not stand so well as in flax or wool, which absorb the globules within their capillary cells. The larger portion of the coloring particles, as a consequence, soon becomes removed by exposure to washing and to wear, and show but faintly the colors given in other fibers which are tubular, and whose transparency forms so many prisms to separate the rays of light which strike them, and which, reflecting each other, ever present a bright and beautiful color to the external eye.

The objects sought to be obtained in producing fibrilia are, to bring out a practical substitute for cotton, to a certain extent, which may be grown in the Northern States, and which may equalize the agricultural with the mechanical and commercial interests of New-England. This would of itself change the whole character and sentiment of the Southern States, and naturally lead them into manufactures and commerce, which they need at the present time to establish and maintain an equilibrium with the North. Equalized thus in general interests of domestic industry, both parts of the country will be better off; and the harmony which would not always exist under a different state of things will be fully established. The United States furnishes one of the most advanced nationalities on the face of the globe, and her natural power of production and recuperation will ever sustain all the population she may foster within her broad arms. To bind these elements together, and keep them in harmony with real progress, there must be peace as well as plenty, concord as well as industry; and no section of the country should demand an injustice of the other. It is to be hoped that the United States may soon realize a great benefit from an increased culture of flax, and be enabled to supply its own seed, which forms a very large item in her present importations.

The production of flax, according to the latest census, (1850,) was 7,709,676 lbs.; of which 2,100,116 lbs. were raised in Kentucky; 1,000,450 in Virginia and 940,577 in New-York; and of flax seed, 562,307 bushels; of which 75,801 bushels were raised in Kentucky; 53,318 in Virginia and 57,963 in New-York. The amount of flax raised in the United States in 1858 was estimated at 8,000,000 lbs.

The imports of unmanufactured flax during the year ending June 30, 1858, were valued at \$197,934.

Linseed is the largest article of import from Calcutta, and has increased more rapidly than any other. In 1841, the shipments from Calcutta to the United States were only 27,000 bags; but in 1857 the imports were

871,000 bags. Since 1850, the increase in the import of linseed has been 25 per cent. each year, and if it continues to increase in the same ratio for ten years to come, it would reach almost a fabulous figure in 1870.

The entire import into the country for four years past has been as follows: 1856, 505,000 bags; 1857, 871,663 bags; 1858; 498,250 bags; 1859, 758,228 bags.

The above includes several cargoes of Bombay seed. This gives an average importation of seed, for the past four years, of 650,000 bags per year. The consumption of the country the past year has been 756,969 bags. This is equal to five-and-a-half million gallons of linseed oil, and 50,000 tons of linseed cake.

THE CHAMBER OF COMMERCE OF NEW-YORK.

THE COASTING TRADE—REGISTRATION OF FOREIGN SHIPPING—FREE TRADE.

The regular monthly meeting of the Chamber took place Thursday, April 4th, at their rooms, corner of Cedar and William streets, and the attendance was more than usually large. The President, PELETIAH PERIT, in the chair.

The following gentlemen, nominated March 7th, were this day elected members of the Chamber:

<i>Names.</i>	<i>Location.</i>	<i>Nominated by</i>
CHARLES W. COPELAND,	122 Broadway,	CALEB BARSTOW.
ABRAM S. HEWITT,	17 Burling Slip,	WILSON G. HUNT.
WILLIAM L. KING,	101 John-street,	I. SMITH HOMANA.
CHARLES SQUIRE, JR.,	10 Bridge-street,	ROYAL PHELPS.

ARCHIBALD GRACIE, Esq., was elected by ballot a member of the Committee of Arbitration, in place of H. W. T. MALL, whose time had expired.

The president informed the Chamber that the report that the legislature had passed a bill conferring judicial powers on the Arbitration Committee was erroneous. As yet it had only passed one house, and not the other.

Mr. OPDYKE, in answer to an inquiry from the chair, stated that the Committee on Quarantine had nothing further to report. The remonstrance had not been prepared, not having been deemed necessary.

The special order of the day was next taken up, viz., the majority and minority reports of the special committee on the coasting and lake trade. The majority report being signed by Captain E. NYE, (Chairman,) WILLIAM T. COLEMAN, F. W. JONES, OLIVER SLATE, JR. The minority report was made by Mr. WILLIAM NELSON.

Remarks of WILLIAM NELSON on the Coasting Trade, &c.

A single fact might satisfy gentlemen that there would be very little risk in opening our coasting trade to foreign vessels. Of all the ships which are constantly loading at this port, for India, China, Australia, east and west coasts of South America, I think I am safe in saying, that not one in one hundred of them is foreign, although they have as much right to load here for those places as our own ships. I might go further, and say, that I believe hardly an instance can be named of a foreign vessel loading here for the places I have mentioned. Why then should we be afraid of any great competition if we should open our coasting trade to California?

Some years ago, England threw open her extensive colonial carrying trade to the ships of all nations. Her object in doing so, no doubt, was to benefit her own citi-

zens generally, by the reduction in freights, which would naturally be produced by competition. Our own ships availed themselves of the privilege, to the profit and advantage of many of them; and it would be unworthy of a great nation like the United States, to be anxious to grasp every thing and unwilling to reciprocate. We have no colonies, and, therefore, have nothing to give in return but our coasting trade, which it appears to me would be made but little use of by foreign vessels.

There is a constant cry that England is monopolizing nearly the whole of the profitable portion of the carrying trade between Great Britain and the United States. Now I think the remedy for that is, that as we cannot or will not build suitable steamers for ourselves, we should be allowed to purchase foreign steamers and place them under the United States flag, and then I have no doubt we can run them and manage them as well as the English people, and have a fair share of the trade for ourselves.

Mr. JOHN H. BROWER made some lengthy remarks in reference to the objects of Mr. LINDSAY's mission—the coasting trade, English steamers, &c.

Captain NYE said that Mr. LINDSAY, when he spoke to the Chamber, proposed the opening of the coasting trade and the California trade. If this were opened, there would soon be a line of steamers running from Victoria to Panama, over 7,500 miles along the Pacific coast. These vessels would receive subsidies from the British government, and carry mails and passengers. As our government had given up granting subsidies, he would recommend that we hold on to the coasting trade, at least until we were able to build iron ships; then we might be in a better position to compete with Great Britain.

After some further remarks from Mr. NELSON, Mr. SNOW said, that in the South Mr. LINDSAY's doctrine was about to go into practice. He would, therefore, move that the present committee be dissolved, that a new committee be organized to make a new report more in accordance with the present position of the country and what it required. If either of the reports were adopted, he would vote for that of the minority.

ROYAL PHELPS said, that the majority report had taken a much wider range than the resolution creating the committee warranted. This question of coasting trade had been brought before the Chamber as the result of several interviews held by the Executive Committee of the Chamber with the Honorable Mr. LINDSAY, a member of the British Parliament. At those interviews, Mr. LINDSAY had become convinced that no measure for throwing open the entire coasting trade of the United States could be carried in this Chamber, and both Mr. LINDSAY and the committee then agreed to limit the discussion to the carrying trade between the Atlantic and Pacific ports. This Chamber was well aware of the liberality the British government had shown to foreign shipping, in throwing open the carrying trade between the mother country and her colonies, as well as the inter-colonial trade; that our ships now traded as freely between Calcutta, Bombay, Ceylon, &c., as British ships, and he could not for a moment believe that this Chamber, in which the shipping interest was so largely represented, would hesitate to grant this small boon to British shipping. Mr. PHELPS particularly urged this course, because, after all, it was not a vote which was going to make a law, or even recommend it to our own government, but merely a simple expression of the opinion of the New-York Chamber of Commerce, elicited at the courteous solicitation of one of England's commercial representatives. Mr. PHELPS added, that as he could not now vote either for the majority or minority reports, he should do so, if during this debate a proper opportunity presented itself.

Mr. PHELPS then offered the following resolution: "That in view of the great advantages which have accrued to American shipping from the liberality of the government of Great Britain, in giving us a perfect equality with her own ships in all her colonial and coasting trade, this Chamber would see with satisfaction such a modification of our coasting trade regulations as would concede to foreign ships all the privileges of our own ships, in the trade between the Atlantic and Pacific ports of the United States by way of Cape Horn."

In regard to the other part of the majority report, viz., that referring to the registration of foreign-built ships, Mr. PHELPS might not have interfered with it had the subject related to wooden ships only, for he believed that in timber and ship-carpenters America had nothing to fear from any nation, but when we come to compete in iron and blacksmiths, the case was very different, and although we might in time be able to build this kind of ships, it was clear we could not do it now; and the question, therefore, was whether we should do it for an indefinite number of years, till by augmented population we could reduce the price of both material and labor, or whether we should allow our countrymen to procure iron ships, where they could be got cheapest; and in this connection we should not lose sight of the fact, that, in adopting the "sit still policy," we should not only have our noble and once unrivalled packet ships driven from the ocean by the iron screw propellers, but that we should have the mortification of witnessing the destruction of the school of one of our most valuable class of citizens, viz., the master's mates of American vessels. Mr. PHELPS then offered the further following resolution, viz.: "That in the opinion of this Chamber it is desirable, for the best interests of trade and commerce, that the law of the United States entitling vessels to registry should be so modified as to allow American citizens to obtain the United States flag for foreign-built iron ships, whether steamers or sailing vessels, the same as if built in the United States."

Mr. OPDYKE coincided with the views of the last speaker, but he thought neither report came up to the question in point. He understood the subject referred to the committee was simply the coasting trade between the Atlantic and the Pacific; but since the Chamber had accepted the reports, the whole subject was before the Chamber. The proposition of Mr. LINDSAY was liberal and founded on just principles of reciprocity; and in his opinion the majority report did not fairly state or deal with it, nor did that of the minority.

After further remarks from Captain NYE,

Mr. BROWER said the merchants of New-York, as a mass, were in favor of free trade. Open the door for free trade; then admit foreign ships to the coasting trade, but not before.

Some further debate ensued, after which Captain MARSHALL said the country was not in a fit position to adopt either of the reports, nor did he think the Chamber was. He would, therefore, move that the consideration of the matter be indefinitely postponed. Adopted with but one or two dissenting voices.

The following nominations were made April 4, for membership, which will be acted upon at the monthly meeting in May:

BENJAMIN F. BUTLER,
MANSFIELD LOVELL,
PETER MARIE,
LUKE T. MERRILL,

47 Exchange Place,
7 New-street,
27 William-street,
189 Broadway,

Nominated by

ROYAL PHELPS.
CALEB F. LINDELEY.
ALEXANDER CAMPBELL.
PAUL SPOFFORD.

On motion, the Chamber adjourned.

HISTORY OF THE UNITED STATES TARIFFS.

FROM THE FIRST ENACTED, 1789, TO THAT OF 1861 INCLUSIVE.

AMONG the chief difficulties which the country encountered in its colonial state was the absence of manufactures, and this want was in some degree allied to the financial difficulties of the several colonies since each had its particular system for raising revenue, and little harmony existed between them. There being no general industrial employment for a large class of people, the general wealth or ability to pay taxes was much less than it would have been had all labor found productive employment. The policy of the Imperial government had been to confine the industry of the colonists to the production of food and raw materials, and to the commerce which grew out of their transportation. The policy of prohibiting manufactures compelled the colonists to seek for their supplies of goods in the mother country, in exchange for their tobacco and the proceeds of fish and flour sold in the West Indies, the Catholic countries of Europe, and elsewhere. Notwithstanding the prohibition of the mother country the strong industrial turn of the people caused some manufactures to spring up, but the extent of that interest at the time of the formation of the federal government was subordinate to both the commercial and agricultural interests. Although the urgent want of manufactures was admitted by common consent, these commercial and agricultural interests did not regard with favor the evident necessity that existed for the heavily indebted federal government to raise its revenue from duties on imported goods. The country was exhausted by its long struggle, and what little capital was possessed by individuals was mostly embarked in commerce. These merchants were jealous of a system of finance which it was apprehended would weigh heavily upon their interests. It so happened that, at the time of the recognition of the United States as an independent nation, the governments of both France and England were disposed to facilitate national intercourse by proximate free trade regulations. In 1786 Mr. Pitt proposed a reciprocal trade between the United States and Great Britain, and in the same policy the governments of France and England negotiated a liberal commercial treaty, by which their reciprocal import duties were ten and twelve per centum ad valorem only, and in December, 1787, by decree, France extended the fullest free trade to the United States. Under these circumstances the thirteen colonies, which had suddenly become one nation by the removal of all internal restraints simultaneously with the opening of the freest external trade to their enterprise, grew with unexampled prosperity. The new lands of the west began, under enterprises stimulated by the active foreign demand for produce, to draw heavily upon the scanty supply of labor. The nascent manufactures were consequently compelled to struggle against want of capital, free importation, almost total absence of manufacturing experience, and scarcity of labor. The country was heavily in debt, and its resources very limited. The right to collect duties upon imports had been delegated by the States to the federal government for its support, and under that right the first tariff of 1789 was passed with the following preamble: "Whereas, it is necessary for the support of the government, for the discharge of the debts of the United States, and the encouragement and protection of manufactures, that duties be laid, etc."

The question here introduced in relation to encouraging manufactures took a definite shape in 1791, when Gen. Hamilton, in his celebrated report claimed power for the federal government to encourage learning, agriculture, manufactures, and commerce under the authority to levy imposts for the "general welfare." This doctrine was immediately opposed by Mr. Madison, Mr. Jefferson, and others, and the operation of the tariff, by a vote of forty-one to eight in favor of a resolution of Mr. Madison, was limited to seven years. The duties imposed by the act of 1789 were very moderate, ranging from five to seven and one-half per centum ad valorem. In 1790 an increase of duties was required to meet the public debts, and this was voted to be collected and paid until "the debts and purposes for which they were pledged shall be fully discharged." Twelve states voted on the adoption of the law. The eight votes of Massachusetts were given against it, also Connecticut two, New Hampshire one, New York one, Maryland two, South Carolina one, making fifteen to forty in favor. The increase in this case was small, and in March, 1792, Gen. Hamilton again asked for two and one-half per cent. more duties, "for the protection of the frontiers and other purposes," remarking:

"The addition of two and one-half per cent. to the duty on the manufacture of articles now rated at five per cent., will constitute an important, though not an excessive augmentation, nevertheless it is proposed that it shall be only temporary, and there is reasonable ground for expectation, that the cause for having recourse to it, will not be of long continuance."

These moderate views in relation to the amount of tax may excite a smile in the present day, but they indicate the comparative poverty of the country at that time, when capital was limited, and currency far from abundant, and when that elasticity which credit and greater play of capital have imparted to commerce in our day did not exist. The duties asked for were granted by a vote of thirty-seven to twenty in the House. Of the twenty votes opposed to this law sixteen came from the South.

In 1794, the tariff was again revised in favor of more revenue. By it the duties on woven goods, and on iron were raised to fifteen per cent., and on glass to twenty per cent. Three years later, viz, March 3d, 1797, more revenue being required, a law was passed adding two and one-half per centum ad valorem to all duties. This law was passed by a vote of sixty-six to twenty-one. Kentucky and Tennessee having been admitted, voted in support of it. Of the twenty-one opposed votes, Pennsylvania gave seven, and Virginia five; Massachusetts three—ten in favor of it. In the course of the fifteen years that elapsed from the passage of the tariff of 1789 to the year 1804, the most astounding changes had taken place in the face of Europe. The French revolution had soon put an end to the liberal commercial policy of France and England, and the events of the subsequent wars had subjected the commerce of the United States to great inconvenience, although they had in some degree increased the demand for agricultural produce. In this country the invention of the cotton gin had given new life to southern industry, and a vast staple to shipping freights, nevertheless the piracies in the Mediterranean had attracted the attention of the government, and in March, 1804, further duties were required for the expenses of their repression. The proceeds of these duties were specially appropriated, to a fund to be called the "Mediterranean fund," to "protect the commerce and seamen of the United States against the Barbary Powers." By this law about two and

one-half per cent additional was laid upon the duties, and it was passed by a unanimous vote, every member present voting yea. Ohio, newly admitted, being included in the affirmative. On the following day, March 27, 1804, a law providing more duties on certain articles was passed, sixty-five to forty-one. From that period the commerce of the country encountered increasing difficulties from the growing animosity between the contending parties in Europe, and their efforts to enlist neutrals in their quarrels. The embargo law, and the non-intercourse laws were finally followed by war. The tariff underwent no further revision until July 1, 1812, when a law was passed doubling all the duties in force, and so to continue until the expiration of one year after the declaration of peace. This law passed the House by a vote of seventy-six to forty-eight. The forty-eight nays were given, twenty-two by New England, nine by New York, two from Pennsylvania, and the remainder from the South. These duties operating during a war when the large force of the enemy was employed in destroying commerce could not be supposed to be very productive, nevertheless, goods being very scarce and high, great profits were derived from the successful landing of cargoes, to the entry of which, these large profits tempted many colonial connivances. The government revenues from that source were, therefore, more than could reasonably have been expected. That tariff of 1812 may, however, be said to have closed the old commercial policy of the government. The return of peace inaugurated a new policy which ultimately produced important results, and which had a great influence upon the course of political events. The tariff of April 27, 1816 was the exponent of an entire new policy, growing out of newly created interests, and before entering upon that we may here illustrate the change from the old to the new policy by inserting the following table, on next page, which shows the duties levied by each general tariff since the formation of the government, upon nine leading heads of imports.

It will be observed that up to 1812 the duties on spirits, sugar, and coffee were specific, and on all others ad valorem. The highest of the latter being upon glass. The tariffs here given are the general tariffs, there were intermediate enactments changing the rates upon special articles. Hence, when in 1812 all the duties were doubled, the rates did not in all cases, as for example on glass, amount to double the rate of 1804. With the tariff of 1816, the specific system came more into use, as in the case of bar iron. There was also introduced, what was called the *minimum* principle, which was in effect a specific duty. Thus the duty upon cotton goods was twenty-five per cent., but all goods that cost less than twenty-five cents per yard were to be deemed to have cost twenty-five cents, on which the duty at twenty-five per cent. would amount to six and one-quarter cents, so that the *minimum* duty which could be paid on cottons was six and one-quarter cents per yard. This principle operating upon cottons was, by the tariff that passed May, 1828, made to operate also to a greater extent upon woollens, as follows :

Woollens costing not over	33½ cts. duty,	14 cts. per yd.	cts.
" " " over	50 " " and not over \$1.00,	45 per cent. or	22.50 pr. yd. min'm
" " " "	\$1.00 " " " "	45 " " " "	45.00 " "
" " " "	2.50 " " " "	45 " " " "	1.12.50 " "
" " " "	3.50 " " " "	45 " " " "	1.80.00 " "

By this operation on cloth that cost forty-five cents per yard would pay fifty per cent; one costing twenty-two and one-half cents per yard

TABLE,

SHOWING THE DUTIES LEVIED BY EACH GENERAL TARIFF SINCE THE FORMATION OF THE GOVERNMENT, UPON
NINE LEADING HEADS OF IMPORTS.

	Distilled Spirits.	Glass.	China.	Sugar.	Coffee.	Pig Iron.	Mann'd Bar Rolled Iron.	Clothing.	Cottons.	Woolens.
July 4,.....1789..	gallon, 10 c... 10	per cent... 10	p. c... 1	c. lb... 2½ c. lb...	5 p. c...	5 p. c...	5 p. c...	7½ p. ct...	5 pr. ct...	5 pr. ct...
August 10,....1790..	" 15 " 12½	" 12½	" 12½	" 1½	" 4	" 5	" 7½	" 7½	" 7½	" 7½
May 2,.....1792..	" 28 " 15	" 15	" 15	" 1½	" 4	" 10	" 10	" 10	" 10	" 10
June 7,.....1794..	" 28 " 20	" 20	" 15	" 1½	" 4	" 15	" 15	" 10	" 15	" 15
March 3,.....1797..	" 29 " 20	" 20	" 16	" 2½	" 5	" 15	" 15	" 10	" 17½	" 15
March 26,....1804..	" 29 " 22½	" 22½	" 17½	" 2½	" 5	" 17½	" 17½	" 12½	" 20	" 17½
July 1, 1812, all } duties doubled. }	" 60 " 40	" 40	" 30	" 5	" 10	p. ct... 30	" 30	" 25	" 40	" 30
April 27,....1816..	" 42 " 20	" 20	" 20	" 3	" 5	c. lb... 20	" 20	" 30	" 25	" 25
May 22,....1824..	" 42 " 30 & 3 c. lb...	" 30	" 20	" 3	" 5	" \$10 p. t...	25	" 30	" 25	" 30
May 19,....1828..	" 57 " 30	" 3	" 20	" 3	" 5	" \$12½	" 25	" 50	" 25	" 45
July 14,....1833..	" 57 " 30	" 3	" 20	" 2½	" Free.	" \$10	" 25	" 50	" 25	" 50
March 2,.....1833*										
September 11, 1841..	pr cent. 20	20	per cent... 20	" 20 p. ct...	"	20 p. c...	20	" 20	" 20	" 20
August 30,....1843..	gallon, 60	" 30 & 6 c. lb...	" 30	" 2½ c. lb...	"	" \$9 p. t...	30	" 50	" 30	" 40
August 6,....1846..	pr. ct. 100	40	per cent... 30	" 30 p. ct...	"	" 30 p. c...	30	" 30	" 25	" 30
March 3,....1857..	" 30	30	" 24	" 24	"	" 24	" 24	" 24	" 19	" 24
March 2,....1861..	gallon, 40	" 30	" 30	" 4 c. lb...	"	" \$6 p. t...	30	" 30	" 30	" 25 13 c. lb.

* Where the duty exceeds 30 per cent., the excess to be reduced biennially until it should cease, 1842.

would pay one hundred per cent; and one costing two dollars and sixty cents per yard would pay seventy per cent. The average would be about eighty per cent, instead of forty-five as given in the table. This system was preserved in the general tariff that passed in 1828. These advancing rates on a specific basis were so much the more onerous upon imports that the progress of inventions and discoveries in machines and science, aided by the sharp competition, that a return of general peace between the countries of Europe, developed, were rapidly reducing the cost of goods, while the qualities were improving. At the time that policy was inaugurated in 1816 a new state of affairs was being developed in respect of the national industry. While the general interests of the country up to the war had been commercial and agricultural, a certain progress had been made in manufactures. Toward the close of the last century spinning of yarns had been introduced from England, and this industry, under the force of new inventions, which had not only extended the supply and cheapened the price of raw materials, but also greatly reduced the cost of manufacturing by supplanting hand labor with marvellous machines, had become greatly extended. The weaving of cloth by machines had not, however, been undertaken, nor had the, in England, newly invented power looms been introduced. Glass, iron and earthenware were represented as flourishing to some extent, but when the war, following the embargo and non-intercourse, that had thrown the capital of the Middle and New England States out of commerce, took place, it found the country in great straits for want of the usually imported manufactures. The ships being laid up, capital sought a new direction, and manufactures offered the field for employment. It was then that Mr. Lowell returned from Europe with a knowledge of all the recently invented spinning and weaving machines. He, in connection with Patrick T. Jackson, Esq., of Boston, started those machine factories that have since grown into the city of Lowell, with its magnificent position in respect to the national industry. These and similar enterprises undertaken during the war formed an interest that thrust itself upon the notice of the government. The war had also developed the financial weakness of the federal government. By paralyzing the commercial interest it had given a rude shock to the union, and the tendency seemed to be to decentralize power, or to destroy the equilibrium, by a so to speak, centrifugal force. Almost the sole means on which the government had to depend was borrowing. In the four years ending with 1815 the whole revenues had been one hundred and forty-eight million six hundred and eighty-four thousand dollars. Of this amount ninety-seven million six hundred and forty-four thousand dollars had been borrowed, and four million had been obtained by taxation. The public debt, therefore, which had been forty-five million one hundred and twenty thousand three hundred and four dollars up to 1st. January, 1812, had risen to one hundred and twenty-seven million three hundred and thirty-four thousand nine hundred and thirty-four dollars, January 1816. The credit of the government was at a low point, and the continuance of the war would have presented accumulating difficulties. There was then an eminent necessity for strengthening the hands of the government not by direct taxes, which could with difficulty be enforced, but by higher indirect taxes. This view was taken by John C. Calhoun, of South Carolina, then a member of the House, and he favored the higher tariff of 1816, which met the views of the grow-

ing manufacturing interests. Acting in concert with Mr. Lowell, of Massachusetts, he proposed in the House the *minimum* system that had been devised by Mr. Lowell, and which was adopted.

The debates on the new tariff which became necessary on the return of peace were the first signs of the crystallization of party views upon the question of protection for protection's sake. Up to that time the protection extended to manufactures was confessedly incidental. The duties had been laid in the view to revenue, and adjusted so as to give the largest amount while aiding manufactures, without interfering with trade. As we have said, the embargo, non-intercourse and war combined to send an enormous amount of capital from the employment of commerce to those manufactures. In the discussion on the tariff, March 22, 1816, Mr. Ingham, of Pennsylvania, said that within eight years previous to that time one hundred million of dollars had in the country been invested in manufactures. This interest was now exposed, not only to the goods that had during the war accumulated abroad, and which came to the United States for a market at all hazards, but to the fact that those goods were the production of the new inventions and discoveries that had in England cheapened cost and improved qualities. Against this triple combination of quantity, cheapened cost, and improved qualities the manufacturers of the country were called upon to contend, and they required that their claims to government aid should be recognized. These claims were contested by the shipping interests, which had also suffered by the war. Mr. Pickens, of Massachusetts, contended that twenty-five per cent. for two years was abundance of protection for manufacturers. Daniel Webster, then representing New Hampshire, proposed that thirty per cent. should be a maximum duty, to be gradually reduced after two years. The great commercial and national interests of the country he contended depended upon free trade. The defences of the country depended upon the navy, which in its turn is born of commerce. That far more employment was given by a certain amount of capital employed in shipping than in the same amount employed in manufacturing. Mr. Smith, of South Carolina, proposed a reduction of the sugar duties claimed for Louisiana, and Mr. Wright, of Pennsylvania, proposed to exclude from voting all members concerned in manufactures. Mr. Randolph was in favor of encouraging individual or family manufacture, but not corporate. Mr. Calhoun, of South Carolina, stated that although his section had no direct interest in manufactures, yet upon national grounds he admitted the claims of the manufacturers. The war had demonstrated the weakness of a country which depended altogether upon foreigners for its supplies, produce, and raw materials in exchange for goods. When hostilities rendered intercourse impossible, the produce could not be sold, and people suffered by being deprived of goods, while the government, distressed in its finances, could get little aid from people whose produce was unsalable. Such an extent of manufactures as would employ a large part of the population in working up materials and food into merchandise that would employ a coasting trade in the interchange was indispensable to the national welfare, and the unity of the States. The course of events in Europe had forced upon the federal government a line of policy, of which embargo and war were the necessary measures. That line of national policy had called into being a large amount of forced manufactures that were necessary to the country. Those manu-

factures had not sprung up in the ordinary course of national industry, but had suddenly resulted from the same national policy that had largely increased the public debt. Peace had come, as a matter of course, bringing with it the necessity of paying the debt, and the danger of ruin to those manufactures which had been called into being by the war. The duty of the government was in levying duties to pay its debts, also to protect those investments of manufactures, which had originated in the same necessity as the debts. The manufactures would be firmly established under the shield of the duty necessary for the discharge of debt, and by the time the debt was paid the protection would be no longer needed. While they were to be protected from the effects of peace, it was also the policy of the government to attract hither those crowds of skilled workmen which the wars of Europe had set afloat. Like the edict of Nantes, the convulsions of Europe had driven forth its industry, of which it would be the part of wisdom to profit. These views prevailed, and the tariff was adopted by a vote of eighty-eight to fifty-four.

It is obvious that the tariff, thus raised in rates, operating upon the flood of goods, which, attracted by the war prices, poured into the country at the return of peace, could not but fill the public treasury. The highest amount ever previously received had been sixteen million three hundred and sixty-three thousand five hundred and fifty dollars in 1808, just before the operation of the embargo. The amount collected in 1816 was thirty-six million three hundred and six thousand eight hundred and seventy-four dollars. This figure, indicative of an enormous importation, was also the precursor of a revulsion in trade, as the consequence of pouring such immense quantities of goods into a country impoverished by war. The amount of imports was one hundred and forty-seven million one hundred and three thousand dollars, consequently the average duty was over twenty-four per cent. against eleven and one-half per cent. in 1808. The large importations were met to some extent by the increased export of domestic produce, which had also accumulated during the war, and which in 1816 reached sixty-four million, exceeding by twenty million, or nearly fifty per cent., the exports of any former year. The excess of imports was still, however, very large, but the incorporation of the new United States Bank, which went into operation April 7, 1817, did much toward sustaining the markets, nevertheless, the pressure, as well upon importers as manufacturers, was very severe.

The new tariff did not have the anticipated effect in aiding manufactures; on the other hand by tempting larger investments in the hope of anticipated profits, it increased the competition, while it dilated the circle of the manufacturing interests. The capital of New England went more decidedly into that branch of industry, so much so, that the voice of New England began now to be decidedly on the side of protection. There is no doubt but that competition had much to do with the continued alleged distress of the manufacturers, but it was also the case that increase of machinery abroad under the new inventions that were rapidly produced, ever cheapening cost, and improving qualities, bore heavily upon the manufacturers here, who did not keep up with those advantages, and they declared those duties, which, in 1816, had by Webster and Pickens been considered abundant, if continued for two years, inadequate. The country was also undergoing re-action from war prices, caused by a return of the banks to specie payments under the action of the new United States

Bank. The inflated currency of the suspended banks during the war, and up to 1818, had been the medium of contracts at high nominal prices, which it had become very onerous to discharge in a specie currency, and this was a fruitful source of that distress, which Mr. Clay so eloquently depicted in the House, March 31, 1824, when he projected his American system. "The general distress," said he, "is indicated by the diminished exports of our national produce; by the alarming diminution of the circulating medium; by the numerous bankruptcies extending to all orders of society; a universal complaint of want of employment, and a reduction of the wages of labor; by the ravenous pursuit after public situations, not for the sake of their honors, but as a means of private subsistence," etc., etc. The remedy according to Mr. Clay, was in the higher duties proposed by the tariff bill of 1824.

"The object of the bill under consideration is to create this home market, and to lay the foundation of a '*genuine American policy*,' and it is incumbent upon the partisans of the '*foreign policy*' to demonstrate that the foreign market is an adequate vent for the surplus produce of our labor."

This was the elaboration of the argument of Mr. Calhoun in 1816, but the South was now satisfied with the existing protection. The government finances were recovering, the debt was being rapidly diminished, and that section no longer regarded with favor a system that they alleged built up an exclusively northern interest. Mr. Clay remarked that if the North and West were unassociated with the South, they would prohibit every foreign fabric; "but," said he, "they are fortunately connected with the South, which believes its interest to require a free admission of foreign manufactures."

The brilliant argument of Mr. Clay found its leading opponent in Mr. Webster. He denounced the term "American policy." "Since the speaker," said he, "denominated the policy he recommends a *new policy in the country*, one is a little curious to know why this imitation of other nations is denominated an '*American policy*,' while on the contrary, a preference for our own established system is called a '*foreign policy*.' Sir, that is the truest American policy which shall most usefully employ American capital and American labor, and best sustain the whole population. He seems to me to argue the question as if all domestic industry were confined to the production of manufactured articles, as if the employment of our own capital and our own labor, in the occupation of commerce and navigation were not as emphatically domestic industry as any other occupation. One man makes a yard of cloth at home; another raises agricultural products and buys a yard of imported cloth. Both these are equally the earnings of American industry. There is no foundation for the distinction which attributes to certain employments the peculiar appellation of '*American industry*.' We hear of the fatal policy of 1816, and yet the law of 1816 was passed avowedly for the benefit of manufactures, and with very few exceptions, imposed upon articles imported very great additions of tax; in some important instances, indeed, amounting to prohibition. Let us now suppose that we are beginning the protection of manufactures by duties on imports. What we are asked to do is to render those duties higher. The government has already done much for protection, and it ought to be presumed to have done enough." These leading arguments by Clay and Webster respectively, were followed by debates on cotton,

woollen, iron, glass, and other articles, all of which claimed protection. Mr. Buchanan, of Pennsylvania, replied to Mr. Webster, charging that the shipping had been protected by the government more than any other interest. Mr. Foote, of Connecticut, made a long argument in opposition to the so-called "American policy." Mr. Clarke, of New York, showed that iron making was then very profitable; and Mr. Todd, of Pennsylvania, replied, contending that iron could not be made without protection. Mr. Hamilton, of South Carolina, said, "We are told, Mr. Speaker, that our manufacturing establishments will, in a very short period, supply the place of the foreign demand. The modesty of this hope may be measured by one or two facts: our factories now take eighty thousand bales, or less than one sixth of the crop, which in 1824 was six hundred thousand bales. Now, how long will it take to increase those manufactures to a scale equal to the consumption of this production can not be determined, but it will be some years after the epitaph will have been written on the fortunes of the South." It may be here called to mind that the crop of 1860 was four million six hundred thousand bales, and the consumption in the United States nine hundred thousand bales, or one-fifth the whole product.

The tariff, thus long and earnestly debated, became a law, and continued in operation four years. If we compare it with four years of the tariff of 1816, we shall find the results, as far as the rates of taxation went, to have been as follows:

	TOTAL DUTIABLE IMPORTS.	DUTIES.	AVERAGE PER CENT.
Tariff of 1816, (four years,) to 1824.....	\$264,962,457.....	\$ 90,480,612.....	35 per cent.
" 1824, " " " " 1828.....	801,568,885.....	121,637,942.....	40½ "

The average duty for the whole period was thus raised five and one-quarter per cent. on the whole amount of dutiable imports, of which the amount imported increased fourteen per cent. In this period of four years the amount of goods imported free of duty was not large, and did not much vary annually in amount. The larger amount of imports that took place under the tariff of 1824, are an index of the great speculative activity that had sprung up all over the world, following the enactment of what was known as Peel's bill, of 1819, which restored specie payments to the Bank of England. The negotiation of foreign loans in London was very active up to 1825, and the capital of England, emanating from London, flowed freely over the commercial world, until the movement ended in the explosion of 1825. In the same period in the United States the new United States Bank had got successfully into operation. The financial machinery of commerce had been restored to working order. The government paid off annually some six million of the public debt, the amount of which had been reduced from one hundred and twenty-seven million in 1816 to ninety million in 1823, and to sixty-seven million four hundred and seventy-five thousand dollars in 1828. This operation had tended to make capital plenty, and the protective system attracted it into manufactures to a considerable extent. The amount employed in woollen manufactures rose from ten millions at the peace, to fifty million in 1827, when the depression, resulting from the revulsion of 1825, involving the failure of the American banker in London, Samuel Williams, was upon the market. The English goods were manufactured under growing improvements in the means of cheapening cost, and the American manufactures encountered them in their market at a

moment when that market, suffering under the effects of the financial revulsion, was surcharged with their own productions; they, therefore, insisted upon a revision of the tariff in their favor, and, January, 1827, Mr. Mallary, of Vermont, presented petitions from woollen manufacturers, praying for relief. He represented the large investments in woollens in New England, the importance they were to the country, and the necessity of sustaining them by the proposed bill, which raised the rates, and applied the minimum principle to them, and without which these interests would be destroyed.

Mr. Cambreleng, representative of New York city, spoke in opposition. He denounced the bill as an attempted imposition upon the House. "That while the bill purported to charge thirty-three and one-third per cent. duty, it really levied two hundred per cent., and that its object was, and its effect would be, entirely to prohibit the import of woollen goods consumed by the poor, while it taxed highly those used by the rich; that the woollen manufacturers were suffering only from their own over speculations." Mr. Buchanan, of Pennsylvania, also opposed the bill "as prohibitive in its nature, and was in no shape one for revenue. He had voted for the protection upon woollens in 1824, but that was no reason why he should favor the prohibition now proposed." Mr. Stevenson, of Pennsylvania, denounced it as a tax upon the poor. Mr. Mitchell, of South Carolina, opposed the bill as oppressive upon the people. "The bills," he said, "of 1789, 1816, and 1824 taxed those who consumed the goods in the proportion in which they consumed them, and that was right and just. The present bill taxes the poor, and exempts the rich." On the other side it was argued by Tristram Burges, of Rhode Island, that "the proposed bill was not to impose higher taxes, but to give the protection that had been sought by that of 1824, but which had been evaded by fraudulent entries." Mr. Cambreleng remarked, that "the bill contained nothing to prevent evasions that had not been in that of 1824, it contained simply higher duties, disguised as low ones." John Davis, of Massachusetts, stated that "under the law of 1824 extensive frauds had been practised, by which the value of one hundred million of property suffered, and it was now sought only to prevent those evasions." H. W. Dwight, of Massachusetts, supported the same view, and claimed that "the bill was to relieve sixty million dollars of property, and seventy thousand people." The bill passed the House, but failed to become a law.

The excitement throughout the country was greatly increased under the efforts of the manufacturing interests, to bring a pressure to bear upon Congress. A convention of the friends of protection was called to meet at Harrisburg, July 30, 1827. It was attended by delegates from the New England and Middle States. The question of protection, in general, was earnestly discussed, and a memorial was drawn up addressed to Congress, accompanied by a draft bill proposing a large augmentation of duties. This action of manufacturers, as a body, added to the excitement of the times, on the approach of the Presidential election, particularly in the planting States, upon the subject of those duties. The protective policy had become the issue on which great parties were divided. The great discussions on the subject took place in 1816, 1820, 1824, and in 1828, each time at the last long session that preceded the Presidential election. Like every subject, which is long publicly dis-

cussed, it had come to excite men's minds, and sections began to demand those positive advantages which they derived from protection as a right, while others resisted the policy as an oppression. The members from the planting States showed continually increasing bitterness, while the favored interests continually demanded more efficient protection.

The excitement caused prudent men, who had favored the protective policy as one that encouraged spinning, weaving, and knitting at home, or fire-side industry, to change their views. The protection seemed more to favor corporate capital, and to operate unequally. The planting States became more determined to resist a policy which they regarded as benefitting the North at their expense, and the North and East became more urgent in demanding a continuance of a system which they alleged had tempted their capital into investments, that would be ruined if the government changed that policy. This ground was taken by Daniel Webster, who, in his speech of 1826, declared for the highest protection, as opposed to the free trade policy that he had formerly advocated. He remarked, "He who is not wise enough to be always right, should be wise enough to change his opinion when he finds that he is wrong." He also stated that when the capital of New England was invested in commerce the interest of that section was free trade, but when the government, by its policy, had driven it from ships into factories, those interests demanded protection under the circumstances thus forced upon them. In this position of affairs the session of 1827-28 came on amid the greatest excitement.

The famous tariff of 1828, in which the protective policy culminated, was drawn up by Silas Wright, of New York, and he defended its protective features on the ground that "it was intended to turn the manufacturing capital of the country to the working up of domestic raw material, and not foreign raw materials. Home grown wool, and not imported wool." Mr. Buchanan, of Pennsylvania, opposed the bill as "prohibitive." "The policy of protection was admitted to be the settled policy of the country, but that was not prohibition. The system of minimum is prohibitive and deceptive; the legislature of Pennsylvania had not sanctioned the propositions of the Harrisburg convention, it had declared in favor of such a tariff as 'would enable our manufactures to enter into fair competition with foreign manufactures.'" In the course of the debate, the sectional tendency of the policy was more and more developed. The legislature of South Carolina strongly remonstrated against the bill, which finally passed on motion of Silas Wright, one hundred and five to seventy-four. Mr. Wilde then moved to amend the title by adding the words, "and for the encouragement of domestic manufactures." Mr. Randolph opposed; he said that "domestic manufactures were those carried on in the families of farmers; that this bill was to rob and plunder one half of the Union for the benefit of the residue." Mr. Drayton moved to amend the title by adding the words, "to increase the profits of certain manufactures." These proposed amendments show the temper which the discussion had evolved.

The passage of the bill increased the heat, and on the 10th of February, 1829, South Carolina, through its senators, Smith and Hayne, entered a protest against the tariff of 1828, as "in violation of State rights, and a usurpation by Congress of powers not granted to it by the constitution; that the power to encourage domestic industry is inconsistent with the idea of any other than a consolidated government; that the power to protect

manufactures is nowhere granted to Congress, but on the other hand, is reserved to the States; that, if it had the power, yet a tariff grossly unequal and oppressive, is such an abuse of that power as is incompatible with a free government; that the interests of South Carolina are agricultural, and to cut off her foreign market, and confine her products to an inadequate home market, is to reduce her to poverty. For these and other reasons the State protests against the tariff as unconstitutional, oppressive, and unjust." The protest was supported by an address from each of the South Carolina senators. Mr. Smith remarked, that "yearly, since the war duties had been demanded and granted, those duties had drawn in greater numbers of manufacturers, who still demanded higher duties, and always obtained them; this system South Carolina had opposed, and now formally protests against it." Mr. Hayne said, "the South, in view of the policy of the government, might almost be considered as a stranger in a strange land. The fruits of their industry, had, from the policy of the federal government, for many years past been flowing to the North in a current as steady and undiverted as the waters of the great gulf, and as the sources of our prosperity were drying up, that reciprocal intercourse which had softened asperities, and bound the different parts of the country together in bonds of common sympathy and affection, had in a great measure subsided, yet the North seems to treat these protests as 'got up for party purposes.'" The protest of South Carolina was ordered to be printed. The ferment in the Southern States, however, took larger proportions. Upon the assembling of the various State legislatures committees were appointed in several States to inquire into the constitutional powers of Congress. North Carolina protested against the law. The State of Alabama denied the power of Congress to lay duties for protection. The legislature of Georgia protested against the tariff, declaring that the true construction of the constitution denied Congress the power to levy duties for protection, and that "it would submit to no other construction."

A convention, held in South Carolina, passed an ordinance, November 17, 1832, declaring the revenue laws of the United States null and void, and enjoined the legislature to carry the decree into effect. The legislature met, and passed the law promptly. The State authorities were now arrayed in opposition to the federal authorities. The militia was armed and organized. There were great fears that a collision would unite all the Southern States in opposition to the North. The federal government organized a force in Charleston, and General Scott was placed in command with two vessels of war. The State collected twelve thousand men, and war was impending when Congress met. The annual message earnestly advised a revision of the tariff, and a reduction of the obnoxious duties to the revenue standard. The debt was about to be extinguished, and less revenues were wanted. After the assembling of Congress the President issued his proclamation to the people of South Carolina, calling upon them to obey the laws. South Carolina replied by counter proclamation from Gov. Hayne. In this state of affairs Mr. Calhoun resigned the Vice Presidency, and was elected to the Senate in order to defend the Southern position. The annual report of the Secretary of the Treasury advised a reduction of duties. Congress immediately took up the tariff, and a bill making great reductions in rates of duties was reported. While the discussion progressed the President communicated to Congress the South Carolina nullifying laws. The

message stated that the Collector had been ordered to remove to Castle Pinckney, but that new powers were required. On January 21, 1833, the bill to enforce the payment of the revenue was reported, and the matter came fully before Congress. The legislatures of the several States being in session, passed resolutions in relation to the tariff. Alabama, Georgia, and North Carolina condemned the tariff as unconstitutional. Georgia proposed a convention of Virginia, North and South Carolina, Alabama, Tennessee, and Mississippi to devise measures of relief. Virginia passed resolutions that "the people of Virginia expect" that neither the federal government nor the State of South Carolina will disturb the public peace. New Hampshire passed resolutions in favor of reducing the tariff to the revenue standard. While these things were passing, Mr. Clay, February 12, introduced a bill for the permanent adjustment of the tariff. It set forth that "duties shall be laid for the purpose of raising such revenue as may be necessary to an economical administration of government." The position was taken that the revenue required a duty of twenty per cent., and that wherever existing duties exceeded that amount, one-tenth of that excess should be taken off September 30, 1835, and one-tenth each alternate year thereafter, until 1841, when one-half the remaining excess should be taken off, and the resulting half September 30, 1842, after which all duties were to be twenty per cent., and to be paid in cash. A large number of articles before taxed were by this bill placed on the free list and it provided for the home valuation of the twenty per cent. duty after 1842. This bill, which was considered as acceding to the demands of South Carolina, became a law. Gov. Hamilton, of South Carolina, accordingly, called the convention together, and communicated to it the modification of the tariff, whereupon an ordinance was passed repealing the nullification law, and the controversy ceased.

The operation of the compromise thus established went on by biennial reductions until 1841. During those years, however, great changes overtook the commercial world, and the finances of the government were powerfully affected by them. One effect of the passage of the tariff of 1828 had been to diminish the import of goods, and to induce, as a consequence, a larger importation of specie. This circumstance gave greater strength to the banking movement, at a time when the harvests of Europe being abundant, money was then cheap, and credits liberal. These circumstances initiated a season of speculation, which was fostered by the war that had sprung up between the government and the United States bank.

The government on removing the deposits, placed them with State banks, with the reiterated injunction to "loan liberally to merchants." The numberless circumstances that combined to bring about the revulsion of 1837, and the suspension of the banks, by cutting short the importation of goods, ruined the government revenue, and reduced it to the issue of Treasury notes to meet current expenses. The large imports of the year ending with 1836, had, on the extinguishment of the public debt, caused a large surplus revenue to accumulate, which had to the extent of twenty-eight million been divided among the States. The revulsion now compelled a return to the tariff for means of revenue. The compromise bill had, however, guaranteed that after 1842 twenty per cent. should be a maximum duty, except in case of war. It was not thought advisable to violate that compromise, but the twenty per

cent. tax was laid upon a large portion of the articles that had been made free by the compromise act. This did not meet the requirement, since in that year the value of free articles imported fell from sixty-six to thirty millions, while those dutiable increased less than eight millions. This did not, however, prevent Congress from passing a law to distribute the proceeds of the public land sales, pro rata among the several States. The law was to become inoperative if the compromise limit of twenty per cent. duties should be infringed. The tariff, therefore, became a question again in the following year. The wants of the government were made the basis of a new movement similar to that of the Harrisburg convention, and a "home league" was formed October 15, 1841, with the object of restoring the high rates. The proceedings of the home league were endorsed by Mr. Clay and the other friends of the "American policy." The President, in his annual message, December, 1841, called attention to the necessary revision of the tariff, advising a moderate increase, and a change of the home valuation principle. The debate upon this passage of the message again opened up the whole question of protection. The financial distress of the federal government made more revenue urgent, and the distress of the manufacturers was urged as a reason why those duties should be high. While urging high duties, however, to supply the government revenues, it was proposed to repeal that section of the land distribution act, which, by its operation, brought the land revenues back into the federal Treasury upon the violation of the compromise act.

In the Senate Messrs. Calhoun, Bagby, Benton, and Woodbury contended with Messrs. Clay, Evans and others, and in the House the debate was very general. Mr. Clay declared the government wants to be the paramount necessity, and appealed to the patriotism of all parties to supply them. Mr. Calhoun objected to the proposed tariff, that it was worse than that of 1828. The average rate was, indeed, ten per cent. less, but the substitution of cash duties for bonds or long credit, the substitution of specific for ad valorem rates on articles that had fallen in value, the home valuation of goods, the arbitrary mode of collecting, and the fact that it went into operation immediately on its passage, all tended to enhance its injurious features. He said, "I shall not dwell on the fact that it openly violates the compromise act, and the pledges given by its author and by Gov. Davis, of Massachusetts, that if the South would adhere to the compromise while it was operating favorably for the manufacturers, they would stand by it when it came to operate favorably for the South. I dwell not on those double breaches of plighted faith, although they are of a serious character, and likely to exercise a very pernicious influence over our future legislation, by preventing amicable adjustments of questions that may hereafter threaten the peace of the country." The bill was passed with a clause repealing the clause of the land law which suspended the distribution of the public lands, making the distribution unconditional. For this it was vetoed, August, 1842, by John Tyler.

The debates were full, but with comparatively little excitement, and since the want of revenue was so apparent the bill became a law without the obnoxious clause. Messrs. Buchanan and Wright voting in favor of it for revenue reasons, but under protest. The law went immediately into operation. Among the changes that it introduced were the payment of duties in cash on the home valuation, by which the collector of the port where any

description of goods should be imported, was to cause to be ascertained the actual value of the article in the principal markets of the country where it was exported, and at the time of the export. To this value should be added costs and charges, including commissions, and the aggregate to be the value on which the duties are charged; all goods of wool imported in an unfinished state shall be valued as if entirely finished at the place of export. The appraisers, collectors, and naval officers were to have power to examine parties under oath in relation to values. These were some of the provisions that were considered very onerous. The tariff went into operation at a time of great general depression in the commercial world, and consequently, in a revenue point of view, it was not so successful as had been hoped. It did not, however, fail to revive the tariff issue at the general elections. The breach of the compromise was charged, but the passage was denied as a party measure. The average charge upon dutiable goods under it was thirty-three per cent., and it yielded an annual average of twenty-six million dollars.

The change of administration was in 1846 followed by the Mexican war, and views in respect of the tariff policy were again changed. The new administration proposed three important measures in relation to the duties; the first to abandon the protective theory in favor of a revenue theory, that is, to reduce the rates of duty, to levy them *ad valorem* only, to make the rates uniform, and to make them payable in cash; the warehouse system to facilitate the carrying trade; and the independent treasury, by which the cash duties were to be collected in gold and silver only.

The message of the President, December, 1841, remarked upon the importance of revenue rather than protection, and advised a reduction of existing rates as necessary to an increase of revenue. The Secretary of the Treasury made an elaborate report of the same tenor, recommending a revenue tariff, in opposition to a protective tariff, or the adjustment of the imports to such a point as would collect the largest revenue without checking the importation, or in other words, the course of trade. Such a bill was introduced from the committee of Ways and Means, by Mr. M'Kay, April 14, 1846. It made eight schedules, in one of which all liquors were charged seventy-five per cent. *ad valorem*, and all other goods under their respective schedules thirty per cent., twenty-five per cent., twenty per cent., fifteen per cent., ten per cent., five per cent. *ad valorem*, and the remainder free.

It was estimated that these duties would give an average of twenty-four per cent. on the dutiable imports, and greatly increase the sum of the duties by admitting of a larger trade. This bill was accompanied by the "warehouseing act," which provided for the payment of duties in cash, and that goods may be deposited in the public stores, subject to the order of the owner for one year upon the payment of duties; that goods in bond may be transported to any other port of entry and other provisions, tending to facilitate the operations of commerce. These bills again opened up the tariff discussion. But the former discussions had exhausted argument *pro* and *con*, and there could be little more said on the subject. Mr. Collamer defended the protective principle because "it was necessary to national independence," and the tariff of 1842, "because it gave revenue enough," and he denounced the abandonment as intended in this bill, of protection as a principle of national government. Mr. Rathbone opposed the new bill as "not likely to give sufficient rev-

enue." The debate was very general, but the tariff passed the House July 3, by a vote of one hundred and fourteen to ninety-five, to go into operation December 1, 1846. The operation of the tariff was extremely simple, all articles not free being charged with *ad valorem* duties. The warehouse system was organized, as also the Independent Treasury system, and the course of trade soon adapted itself to the new regulation of specie payments.

The tariff operated ten years and seven months, viz., from the 1st of December, 1846, to the 1st of July, 1857, and in accordance with the estimates it averaged twenty-four and one-half per cent. on the dutiable imports. The average duties under the tariff of 1842 had been twenty-six million dollars per annum. The average of the tariff of 1846 was forty-six million dollars per annum during its operation. It is to be borne in mind, however, that the effect of the gold discoveries by imparting great activity to trade in general, promoted larger aggregate exports from the country, which, since it had become a gold exporting country, could receive its pay only in those goods which were charged with duty. The same influence had also caused a rise in the value of commodities, and of course, a larger yield to *ad valorem* duties operating upon those higher values.

The same causes, which had imparted such activity to the import trade, had given animation to manufactures of all descriptions, and while the government treasury was overflowing with revenue, the general prosperity was apparently sound. The large revenue yielded by the tariff was in excess of the expenditures, and a considerable accumulation of gold took place in the Treasury vaults.

This was not quite in accordance with the sub-treasury law, which contemplated an amount of revenue no greater than the expenditure, so that the gold should pass through the treasury without stopping, thus keeping the specie currency active. The accumulation was felt to be an inconvenience, and the government sought to reduce it by the purchase of the outstanding stock at high premiums, but a permanent remedy was proposed in a reduction of the rates of duty upon all imported goods.

President Pierce, in his message of December, 1856, called attention to the annual report of Mr. Guthrie, Secretary of Treasury, in relation to the necessity of reducing the duties. The report set forth the large revenues in excess of the wants of the government, and argued that as all duties are a tax upon the people, they should be reduced when no longer required for the public service. It advised the placing of all materials that enter into manufactures, such as are free in Great Britain, upon the free list, and also salt as a necessity for Western provision packers.

A tariff bill was in accordance with these recommendations reported in the House January 14, and engaged discussion. Mr. Durfee, of Rhode Island, advocated free materials, but wished to discriminate in favor of American manufactures. There was but little general interest manifested in the country in respect to the proposed changes. The manufacturers of the East seemed more disposed to favor the free introduction of raw materials than to increase the tax upon the imported goods. The merchants of New York petitioned for a removal of the duties on sugar. The debate in the House went off until January, when it became more general upon the bill reported by the Committee of Ways and Means. Mr. Stanton, of Ohio, said it was very evident that the revenue must be reduced, but that the bill offered was a manufacturers' bill, intended to favor the wool manufacturers of the East at the expense of the wool

growers of the West. Mr. Washburn, of Illinois, wanted lead protected. Mr. DeWitt, of Massachusetts, favored the reduction of revenue by freeing raw materials. In the Senate Mr. Adams, of Mississippi, proposed making rail road iron free. In the House Messrs. Smith and Garnett, of Virginia, favored free trade. Mr. Letcher proposed a reduction of twenty per cent. on the tariff of 1846. Mr. Campbell, of Ohio, offered a substitute for the bill of which the general features were nearly the same as those of the committee of Ways and Means. This finally passed, one hundred and ten to eighty-four. Mr. Stanton, of Ohio, denounced it as passed by "fraudulent combination of those who favored the protection hemp, of sugar, iron, and the woollen manufactures of Massachusetts. It was a blow at the wool grower."

In the Senate Mr. Hunter substituted a new bill with large reductions. This was opposed by Mr. Brodhead, of Pennsylvania, who favored the House bills. Mr. Wilson, of Massachusetts, opposed it, because he said the object was to reduce the revenue, and these reductions would increase it by tempting importation. Mr. Collamer, of Vermont, took the same view of it. Mr. Pugh, of Ohio, opposed both, he said, "the wool manufacturers seek to ruin the wool growers." Mr. Toombs favored larger reductions. Mr. Butler, of South Carolina, wanted the tariff abolished altogether. Mr. Toucey, of Connecticut, wanted the revenue diminished by adding largely to the free list. Mr. Hunter's bill finally passed, with an amendment by Mr. Douglas, that wool under twenty cents, foreign valuation, should be free. A committee of conference finally reported Mr. Hunter's bill with the free list of Mr. Campbell's. This passed the House one hundred and twenty-four to seventy-one, March 3d, to go into operation July 1st, 1857.

The effect of the tariff was to check importation in the spring, and to cause a great accumulation of merchandise in bond, to be released after July 1st. The important reduction from one hundred per cent to thirty per cent. on spirits, caused a large quantity to arrive, and the failure of the Louisiana sugar crop in that year, added very greatly to the effect of the reduction of the duty upon sugar, from thirty to twenty-four per cent. The elements of revulsion began to manifest themselves with the operations of the tariff, in the first months of which the goods in warehouse were put upon the market. The money pressure that followed came in aid of the designs of the projector of the tariff, in reducing the revenue, which fell from sixty-three millions eight hundred and seventy-five thousand nine hundred and five in the last year of the tariff of 1846, to forty-one millions seven hundred and eighty-nine thousand six hundred and twenty-one dollars, in 1858. This diminution of the customs added to that of the land sales under the reaction of speculation, carried the revenue far below the amount required for the wants of the government. This result once more brought with it the necessity for a revision of the tariff in order to restore the revenue. The circumstances that attended the session of 1860-61, were such as enabled the passage of the bill reported by the Committee of Ways and Means with little debate or investigation. The act has restored the highest protective character to the tariff, replacing the ad valorem with complicated specific duties, and the bill went into operation at such short notice as caused it to operate upon goods ordered under the old tariff. There are generally existing circumstances that attend the operation of the tariff that may interfere with the revenue from it.

THE TARIFFS OF THE UNITED STATES.

Statement showing the Revenue collected each year from 1789 to 1860, the amount of Dutiable Imports and Free Goods imported annually, and the average rate of duty on Imports, annually.

From 4th Mar. 1789 to 31st Dec.,	Tariffs.	Customs.	Total Imports.	Duties per cent.		
1790.. Aug. 10... General.....						
1791.. Mar. 8... Spirits.....		\$4,909,478 09	\$52,200,000	8½		
1792.. May 2... General.....		3,443,070 85	81,500,000	11		
1793.....		4,355,806 56	81,100,000	12½		
1794.. June 7... General.....		4,801,065 28	84,600,000	14		
1795.. Jan. 29... Supplementary..		5,583,461 26	69,756,268	9		
1796.....		6,567,937 94	81,436,164	5½		
1797.. Mar. 8... General.....		7,549,649 65	75,379,406	70		
1798.....		7,106,061 58	63,551,700	10½		
1799.....		6,610,449 81	79,039,143	8½		
1800.. Mar. 13... Sugar & wines..		9,080,983 73	91,252,763	9½		
1801.....		10,750,773 98	111,263,511	9		
1802.....		12,453,335 74	76,333,333	16		
1803.....		10,479,417 61	64,666,666	16		
1804.. Mar. 26... Mediterran. fund.		11,093,535 88	85,000,000	14		
1805.. Mar. 27... Light money....		12,936,437 04	120,600,000	10½		
1806.....		14,667,698 17	129,410,000	11½		
1807.....		15,845,521 61	123,500,000	11½		
1808.....		16,263,550 53	56,990,000	30		
1809.....		7,294,090 58	59,400,000	13		
1810.....		8,583,309 81	85,400,000	10		
1811.....		13,313,322 73	53,400,000	25		
1812.. July 1.... War: double dut.		8,958,777 53	77,080,000	11½		
1813.. July 13... Salt.....		13,294,633 25	22,005,000	60		
1814.....		5,993,773 08	12,965,000	47		
1815.....		7,333,943 22	13,041,274	55		
1816.. April 27... Min. for proteo.		36,206,374 83	147,103,000	25		
1817.....		36,233,343 49	99,350,000	37		
1818.. April 20... Iron and alum..		17,176,335 00	121,750,000	14		
1819.. Mar. 3.... Wines.....		20,233,603 76	87,125,000	23		
1820.....		15,005,612 15	74,450,000	20½		
		Customs.	Free.	IMPORTS. Dutiable.	Total	Average on dut.
1821.....		18,475,708 57	10,033,313	52,508,411	62,565,724	25.6
1822.....		24,064,066 43	7,293,708	73,942,333	83,241,541	31.7
1823.....		23,403,094 99	9,043,233	63,530,979	77,579,267	32.7
1824.. May 22... General rise....		25,436,517 66	12,563,773	67,935,334	80,549,007	37.5
1825.....		31,333,371 50	10,947,510	85,392,535	96,340,075	37.1
1826.....		26,033,361 97	12,567,769	73,406,703	84,974,477	34.6
1827.....		27,943,956 57	11,355,104	67,633,904	79,434,068	41.3
1828.. May 19... Min. extended..		29,951,351 90	12,379,176	76,130,643	88,509,834	39.2

	Customs.	Free.	Imports. Dutiable.	Total.	Average On dut.
1822.....	27,628,701 11	11,805,501	63,687,026	74,492,527	44.8
1822.. May 20.....	Coff., tea, molass. 23,829,505 05	12,744,245	58,180,675	70,976,920	48.8
1821.....	24,594,118 19	13,454,625	89,784,498	108,191,124	40.8
1822.. July 14.....	Modifications. 29,841,175 65	14,249,453	86,779,312	101,029,366	38.8
1823.. March 2... Compromise.....	24,177,578 52	32,447,950	75,670,861	108,118,811	31.9
1824.....	18,960,705 94	63,893,180	53,128,153	126,521,832	32.6
1825.....	25,890,796 66	77,940,498	71,955,249	149,895,742	34.0
1826.....	30,818,827 67	92,054,481	97,923,554	189,990,065	31.6
1827.....	18,124,181 01	69,350,081	71,739,186	140,989,317	25.3
1828.....	19,702,825 45	60,840,005	52,857,899	112,717,404	37.8
1829.....	25,554,523 96	74,401,792	85,690,840	162,092,189	29.9
1830.....	15,104,790 63	57,194,204	49,945,815	107,141,519	30.4
1831.. Sept. 11... Free list taxed.....	19,919,499 17	66,019,781	61,924,446	127,946,177	32.2
1832.. Aug. 30... General rise.....	16,662,746 84	80,627,486	69,534,601	100,162,067	22.1
1833.....	10,208,000 42	35,574,584	29,179,315	64,753,799	25.7
1834.....	29,326,357 88	24,766,881	83,663,154	108,425,085	25.1
1835.....	30,952,416 21	22,147,840	95,104,794	117,254,564	22.5
1836.....	Revenue tariff. 24,712,668 00	24,767,789	96,224,058	121,691,797	26½
1837.....	23,747,865 00	41,772,686	104,773,002	146,545,688	22½
1838.....	31,757,071 00	22,716,608	122,282,825	154,993,228	24
1839.....	23,846,789 00	22,876,661	125,479,774	147,807,429	22
1840.....	39,668,686 00	22,710,883	155,437,968	178,188,318	25.2
1841.....	49,017,568 00	25,006,587	191,118,845	216,224,983	26
1842.....	47,829,826 00	29,692,984	182,253,508	212,945,442	26
1843.....	53,931,365 00	31,838,534	236,595,118	267,973,647	25
1844.....	64,224,190 00	33,285,821	271,276,560	304,562,881	22.5
1845.....	53,025,794 00	40,090,826	221,873,184	261,468,590	23
1846.....	64,022,868 00	26,958,704	257,634,228	314,629,942	25
1847.. March 3... General.....	63,575,905 00	64,729,206	294,160,835	360,890,141	21.5
1848.....	41,739,631 00	80,319,975	302,293,875	382,612,150	20
1849.....	49,565,824 00	79,721,116	259,047,014	388,768,180	19
1850.....	58,187,511 00	90,841,749	279,872,827	369,169,941	19
1851.. Feb. 26 present. Partly est.	45,000,000 00	70,000,000	225,000,000	295,000,000	20

RECAPITULATION.

Date of Tariff	Time of operation.	Average per an. in mill.	Gross Revenue.	Dutiable Imports.	Average duty.
1821 to 1824.....	4 years.....	24.....	\$90,426,612	\$264,962,457	34½
1824 to 1828.....	4 years.....	29.....	115,597,942	301,583,885	33½
1828 to 1829.....	4 years.....	30.....	122,615,500	297,282,015	41½
1829 to 1841.....	9 years.....	22.....	193,263,107	625,386,002	31½
1842.....	1 year.....	16.....	16,622,746	69,534,601	22½
1843 to 1846.....	4 years.....	26.....	97,109,442	295,173,151	23
1846 to 1857.....	10 years.....	52.....	522,957,872	2,173,423,512	24½
1857 to 1860.....	3 years.....	43.....	144,542,958	741,212,216	20½
Total.....	39	34	\$1,308,546,177	\$4,709,084,145	29

Having thus briefly sketched the leading circumstances that have attended the enactment of each of the tariffs passed since the formation of the government, we may here give from official sources a table showing the date and nature of the tariffs passed since the formation of the government; the amount of customs collected in each year, and the amount of imports on which these duties were paid.

Up to the year 1821, there were no official tables that would distinguish the free from the dutiable imports, and the total imports given before that year, are the estimates of the department. Since 1821, the amount of imports has been accurately reported. In the recapitulation, we have shown the amount of custom duties collected under each bill, and the whole amount of goods on which they were paid. It will be observed that the amount of imports, as well as the sum of the duties, seems to have fluctuated more in proportion to the general activity based upon financial prosperity, than upon the actual amount of tax levied. Thus, in the year 1842, which was one of great depression, after the financial revulsion then just passed, the average duty was twenty-three one-quarter per cent., and the revenue but sixteen millions six hundred thousand dollars, on the other hand, between the years 1846 and 1857, an average duty of twenty-four one-half per cent., gave an annual average revenue of fifty-two million dollars, or more than three times what the same average tax produced in 1842. Again in the four years ending with 1842, the average tax was forty-one one-half per cent., and the average annual product thirty millions; in the three years ending with 1860, the average tax was twenty one-quarter per cent., and the product forty-eight millions per annum. Thus, half the tax gave double the revenue. These facts, with others disclosed by the table, show that the rate of duty levied is a very unsafe guide as to the amount of revenue to be derived from it. The general circumstances of business, as well abroad, as at home, has far more influence upon the flow of importations than the tax which is relatively lighter or more onerous, in proportion to the range of prices that rise or fall under the influence of speculation or its revulsion.

The interests of domestic industry have uniformly had an important influence upon the various modifications that the protective character of the tariffs has from time to time undergone. Since the formation of the government the progress of manufactures has been very rapid, since in 1850, the annual value so produced, was reported at over one thousand millions, an interest which on its face is large. With this development, the proportion per cent. of similar goods imported has decreased. The home manufacturers have had more command of capital, and have been enabled to adopt and apply the newest inventions for the improvement of qualities and the reduction of cost. They have, therefore, found their position annually stronger. As a consequence, the Eastern and Northern interest, which in the early years of the government passed from a commercial to a manufacturing interest, that is, from free trade to protection, have latterly become more indifferent to the exclusion of foreign wares, but have sought their interests in cheaper materials; and this disposition has elicited an opposition from the Western agriculturists, who cling to protection for raw materials. Meanwhile, the trade of the country has become so largely developed, that a moderate tax upon the whole amount of imports gives a revenue which should be ample to an economical administration of the government.

VOTES BY STATES ON THE PASSAGE OF THE GENERAL TARIFF LAWS.

The following table shows the votes given in the House of Representatives on the passage of each of the general tariff passed since that of 1790, the changing character of the vote East, South, and West, while the steady vote of the northern Middle States is conspicuous for its adherence to high rates.

	1790.	1791.	1792.	1797.	1804.	1812.	1816.	1824.	1828.	1832.	1833.	1842.	1846.	1857.
	Yea. Nay.	Yea. Nay.	Yea. Nay.	Yea. Nay.	Yea. Nay.	Yea. Nay.	Yea. Nay.	Yea. Nay.	Yea. Nay.	Yea. Nay.	Yea. Nay.	Yea. Nay.	Yea. Nay.	Yea. Nay.
Maine.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Hampshire,	3..1	8..	2..1	4..	8..	3..1	1..8	1..6	4..3	6..1	6..1	4..3	6..1	6..
Vermont.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3..1
Massachusetts,	8..	8..	1..1	3..	8..	6..1	6..1	6..	6..3	8..	4..1	4..4	8..1	9..
Connecticut,	3..3	5..	6..	10..1	15..	2..18	2..4	1..11	3..11	4..8	18..	10..1	1..4	9..
Rhode Island,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
New York.....	4..1	4..2	4..3	7..1	8..	5..9	20..3	26..8	1..1	3..3	3..3	28..8	15..14	1..1
New Jersey,	3..	4..	3..	4..	5..	6..	6..	6..	6..	27..3	11..19	6..	6..	15..10
Pennsylvania,	7..	8..8	5..	5..7	15..	16..9	17..8	24..1	5..	8..3	4..31	20..	9..28	8..15
Delaware.....	1..	1..	1..	5..1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1..
Maryland.....	8..3	1..8	8..8	5..2	6..	5..8	2..5	8..6	1..5	11..8	90..1	3..17	1..1	18..
Virginia.....	7..	4..4	7..	9..5	17..	14..7	7..18	1..31	3..15	8..4	18..	10..	7..8	6..
North Carolina,	5..	4..4	1..4	5..9	9..	6..8	11..	..18	..18	3..6	9..	5..	5..2	4..
South Carolina,	8..1	1..3	8..2	8..1	5..	6..1	4..8	..9	..8	8..4	19..	1..7	4..6	7..3
Georgia.....	8..	.....	.....	.....	9..	8..8	8..8	11..7	13..7	9..3	8..1	8..6	11..8	5..15
Kentucky.....	.....	.....	.....	.....	5..	4..	6..1	..7	..7	1..6	7..6	2..1	3..1	8..8
Tennessee.....	.....	.....	.....	.....	5..	3..	8..3	14..7	18..9	2..3	2..6	3..6	5..5	7..
Ohio.....	.....	.....	.....	1..	1..	1..	4..1	2..7	18..9	19..	9..1	8..6	11..8	5..15
Louisiana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7..
Indiana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
Illinois.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
Alabama.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
Missouri.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
Arkansas.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
Mississippi.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
Michigan.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
Florida.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
Texas.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
California.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
Idaho.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
Wisconsin.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4..
40..15	85..91	87..90	66..91	98..	76..68	88..64	107..109	106..94	189..85	119..85	108..99	114..95	129..71	

SUMMARY OF LAKE DISASTERS, 1851-1860.

Compiled for the report of the seventh annual meeting of the Board of Lake Underwriters,
held at New York City, February 19, 1861.

MANNER OF LOSS.	1851.		1852.		1853.		1854.		1855.	
	NO.	\$ LOSS.	NO.	\$ LOSS.	NO.	\$ LOSS.	NO.	\$ LOSS.	NO.	\$ LOSS.
Steamers.										
Wrecked and Sunk.....	3	37,000	8	125,000	8	128,000	4	110,000	4	378,500
Stranded.....	5	86,700	5	14,700	7	51,000	9	110,000	11	11,250
Fire.....	2	35,600	2	23,000	8	156,000	9	110,000	8	44,000
Damaged, &c.....	18	110,900	9	18,600	19	54,700	24	77,300	26	66,300
Jettison.....	..	..	2	14,000	..	..	1	25,000	..	..
Collision.....	9	6,000	16	153,350	11	31,650	8	31,200	19	32,600
Derrick.....	..	..	..	..	..	30,000	..	..	..	..
Total....	89	215,500	87	352,650	48	419,350	41	463,400	56	582,750
Propellers.										
Wrecked and sunk.....	2	55,000	4	85,000	1	42,000	5	370,000	7	351,000
Stranded.....	6	32,900	5	4,900	7	38,900	..	..	11	9,950
Fire.....	..	..	8	57,500	..	..	2	180,000	..	..
Damaged, &c.....	5	5,000	11	38,000	10	24,500	80	58,100	34	228,150
Jettison.....	..	..	4	18,200	2	2,200	7	47,500	4	18,100
Collision.....	10	40,400	9	78,450	4	8,900	8	69,500	19	557,750
Sunk and Raised.....	..	..	..	..	..	..	..	..	..	..
Total....	28	188,300	36	274,050	24	101,600	52	680,100	75	1,159,950
Barques.										
Wrecked and Sunk.....	..	..	2	22,000	2	19,500	3	56,000	6	116,000
Stranded.....	..	..	..	..	5	4,500	..	..	6	10,800
Fire.....	..	..	..	..	..	..	..	..	..	..
Damaged.....	..	..	1	150	5	4,600	12	37,100	17	46,050
Jettison.....	..	..	1	4,000	..	..	..	..	2	5,000
Collision.....	..	..	1	200	..	..	2	55,000	5	9,900
Total....	..	..	5	26,350	12	28,600	17	148,100	36	187,750
Brigs.										
Wrecked and Sunk.....	3	42,000	7	52,400	2	43,000	5	68,000	7	118,200
Stranded.....	23	80,000	18	25,600	10	15,800	..	..	8	8,550
Fire.....	..	..	..	..	..	..	..	..	..	..
Damaged.....	21	45,700	12	19,750	17	24,500	43	64,125	51	39,950
Jettison.....	..	..	..	..	..	..	1	6,000	8	22,500
Collision.....	7	16,200	6	3,350	2	2,500	6	51,000	11	26,100
Total....	58	188,900	38	101,100	31	85,800	55	184,125	85	215,400
Schooners.										
Wrecked and Sunk.....	29	69,000	21	109,800	22	111,700	41	382,680	26	182,300
Stranded.....	63	33,220	49	70,500	43	64,800	..	..	91	161,600
Fire.....	2	7,500	1	5,500	8	9,400	2	22,500	1	500
Damaged.....	89	57,765	80	24,780	66	78,500	183	216,450	185	312,179
Jettison.....	3	2,700	2	1,150	4	7,900	20	30,370	14	32,510
Collision.....	15	34,500	18	24,950	13	21,200	9	49,150	25	97,000
Flood at Chicago.....	..	..	..	..	..	..	..	..	..	..
Total.....	150	244,715	190	286,190	150	287,800	204	701,000	309	637,339
Boats.										
Wrecked and sunk.....	2	1,700	..	..	1	1,300	2	6,000	1	2,000
Stranded.....	2	700	1	150	..	..	..	..	4	8,600
Fire.....	..	..	..	..	..	..	..	..	..	..
Damaged.....	2	800	8	575	2	1,100	11	3,800	6	6,900
Jettison.....	..	..	..	..	..	..	1	500	1	100
Collision.....	..	..	..	..	..	..	1	500	1	1,800
Total....	6	3,200	4	725	3	2,900	15	10,900	13	14,600
Summary.										
Steamboats.....	39	215,500	37	352,650	48	419,350	41	463,400	56	582,750
Propellers.....	28	188,300	36	274,050	24	101,600	52	680,100	75	1,159,950
Barques.....	..	..	5	26,350	12	28,600	17	148,400	36	187,750
Brigs.....	58	188,900	38	101,100	31	85,800	55	184,125	85	215,400
Schooners.....	150	244,715	190	286,190	150	287,800	204	701,000	309	637,339
Boats.....	6	3,200	4	725	3	2,900	15	10,900	13	14,600
Derrick.....	..	..	..	..	..	30,000	..	..	..	..
Total 1851-1860.	264	730,515	240	991,065	263	944,350	334	2,137,925	567	3,797,539

SUMMARY OF LAKE DISASTERS [Continued], 1851—1860.

Compiled for the report of the seventh annual meeting of the Board of Lake Underwriters, held at New York City, February 19, 1861.

MANNER OF LOSS.	1856.		1857.		1858.		1859.		1860.	
	NO.	\$ LOSS.	NO.	\$ LOSS.	NO.	\$ LOSS.	NO.	\$ LOSS.	NO.	\$ LOSS.
Steamers.										
Wrecked and Sunk.....	7	159,000	4	49,300	4	83,800	4	3,900	3	65,000
Stranded.....	15	71,890	5	9,950	6	13,400	4	16,800	5	4,900
Fire.....	4	280,000	6	125,500	3	28,000	1	12,000	2	3,500
Damaged, &c.....	16	92,100	17	28,950	18	11,875	20	20,685	17	17,715
Jettison.....	2	8,200	.....	.....	1	100	1	3,500	1	2,500
Collision.....	9	61,800	8	9,650	6	11,200	8	800	6	47,400
Total.....	58	617,790	40	228,250	37	98,875	38	56,685	34	148,015
Propellers.										
Wrecked and sunk.....	7	879,800	1	17,800	1	10,100	7	225,050	7	253,500
Stranded.....	19	158,560	17	88,110	7	4,700	16	18,780	11	28,800
Fire.....	6	223,600	4	45,200	5	26,700	1	100	8	33,000
Damaged, &c.....	22	41,700	83	59,920	20	20,150	24	12,540	20	17,498
Jettison.....	3	10,100	1	8,000	2	20,500	3	2,150	3	5,775
Collision.....	16	76,700	9	36,000	7	4,650	7	41,250	5	9,900
Total.....	72	888,960	65	254,542	42	91,880	58	294,850	59	349,368
Barques.										
Wrecked and Sunk.....	1	84,000	3	22,000	5	82,300	.....	.....	4	10,800
Stranded.....	10	66,000	8	57,550	5	31,378	5	6,740	5	33,225
Fire.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Damaged, &c.....	17	82,650	10	13,550	14	9,150	15	24,100	7	2,900
Jettison.....	1	4,000	1	1,864	.....	.....	.....	.....	.....	.....
Collision.....	9	10,550	5	2,850	2	1,050	3	2,575	6	3,150
Total.....	38	147,700	27	98,314	26	123,778	23	33,415	22	49,575
Brigs.										
Wrecked and Sunk.....	4	56,200	5	19,850	2	6,400	6	35,100	4	25,800
Stranded.....	29	67,900	18	63,370	6	23,210	10	15,900	9	28,120
Fire.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Damaged, &c.....	22	15,350	14	6,500	15	18,880	9	5,630	7	5,225
Jettison.....	5	15,000	1	700	.....	.....	1	700	1	600
Collision.....	12	45,250	6	9,200	3	650	6	23,700	4	650
Total.....	72	208,900	44	99,620	26	43,590	33	58,080	25	60,485
Schooners.										
Wrecked and Sunk.....	45	567,625	58	301,000	24	179,600	18	64,688	31	148,950
Stranded.....	118	436,974	105	168,675	59	90,640	73	279,831	75	197,372
Fire.....	.....	.....	1	6,000	.....	.....	3	8,550	.....	.....
Damaged, &c.....	119	108,550	67	53,574	89	46,955	121	101,732	85	48,398
Jettison.....	18	16,000	17	25,400	5	7,450	15	11,064	8	1,970
Collision.....	46	119,650	84	79,650	84	22,086	84	63,005	31	86,790
Total.....	340	1,245,799	277	651,559	205	389,741	269	523,420	215	478,375
Scows.										
Wrecked and sunk.....	4	2,100	9	49,900	11	90,550	5	8,950	12	57,600
Stranded.....	7	7,645	6	2,700	9	7,668	11	13,450	8	6,195
Fire.....	.....	.....	1	1,200	.....	.....	.....	.....	.....	.....
Damaged, &c.....	2	600	10	6,400	5	6,650	7	1,650	2	1,250
Jettison.....	1	100	.....	.....	.....	.....	.....	.....	2	180
Collision.....	1	150	2	400	1	50	2	850	3	4,962
Total.....	15	17,595	28	60,600	26	84,918	25	23,700	27	70,187
Summary.										
Steamboats.....	58	617,790	40	228,250	37	98,875	38	56,685	34	148,015
Propellers.....	72	888,960	65	254,542	42	91,880	58	294,850	59	349,368
Barques.....	38	147,700	27	98,314	26	123,778	23	33,415	22	49,575
Brigs.....	72	208,900	44	99,620	26	43,590	33	58,080	25	60,485
Schooners.....	340	1,245,799	277	651,559	205	389,741	269	523,420	215	478,375
Scows.....	15	17,595	28	60,600	26	84,918	25	23,700	27	70,187
Derrick.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total 1856—1860.....	590	3,126,744	481	1,387,865	323	783,283	440	1,020,100	382	1,156,015

MARINE LOSSES FOR MARCH, 1861.

*. The first column refers to the date of the New York papers wherein full information of the disasters can be obtained.

DATE	STREAMERS.	MASTERS.	TONS.	WHERE BUILT.	DATE.	HAIL FROM.	WHERE FROM.	WHERE TO.	DISASTERS.	VESSEL AND FREIGHT.	CARGO.	TOTAL.
12	Australasian (Br.)	Hockley,	1760	Glasgow.	1857	Glasgow.	Liverpool.	New York,	Br'se propel. & put back Queenstown, Mr. 2	\$25,000	\$10,000	\$35,000
13	Gen. Flores	Thby.	170	New York.	1860	Wilmington.	New York.	Calico.	Put into St. Thomas, in distress, Feb. 9.	6,000	.....	6,000
14	Hankow	Sand.	730	New York.	1860	New York.	New York.	Hong Kong.	Dam. in gale in G. Strm. Feb. 20. Put back rep.	7,500	.....	7,500
4	Mount Vernon	Layfield,	632	Greenpoint.	1856	New York.	New York.	Washington.	Asbore on Old Inlet Bar (off), Mar. 3.	20,000	10,000	30,000
8	Monarch	J. Smith,	590	Ohio River.	1856	Cincinnati.	Cincinnati.	New Orleans.	Sir & rock, & n. n. Falls at Louisville, Mr. 1	25,000	40,000	65,000
19	Uncle Sam	Wilson,	1433	New York.	1859	New York.	Panama.	San Francisco.	Broke shaft, and put in Acapulco, Feb. 19.	15,000	5,000	20,000
19	Valley City	Chapman,	1390	Philadelphia.	1859	Philadelphia.	New York.	Derby, Ct.	Asbore in Black Rock Harbor, Ct.	2,000	1,000	3,000
									7 Steamers.	\$103,500	\$56,000	\$159,500
									Totals.			
15	Bella Marina (Br.)	Harris,	1046	London, N.Y.	1855	St. Johns, N.B.	Liverpool.	San Francisco.	Put into Belfast, loss sails, &c. (coal) Feb. 28	\$1,000	\$200	\$1,200
23	Conquest (Br.)	Johnson,	1095	San Francisco, Ms.	1854	Boston.	Montevideo.	San Francisco.	Asbore in Casuarren Bay, Feb. 1, Mar. 2.	55,000	55,000	110,000
16	Cygnat	Moore,	590	Madford.	1854	Boston.	Calcutta.	New York.	Put into Rio Janeiro, leaky, Jan. 27.	1,000	.....	1,000
16	Drono	May,	906	Plymouth, Ma.	1855	New Bedford.	Eastport.	Brittoli, Br.	Put into Bermuda, leaky, Feb. 24, Feb. 5.	1,900	8,600	10,500
26	Danube (Br.)	Walden,	1104	Quebec.	1854	Belfast.	New Orleans.	Liverpool.	Put into St. Patrick's Causeway, W. M., Mr. 6	52,000	96,000	148,000
12	Flying Eagle	Walden,	1095	Newcastle, Me.	1853	Boston.	New York.	San Francisco.	Put into Montevideo, in distress, Feb. 24.	2,000	.....	2,000
16	Hartford	Davis,	510	Portland, Ct.	1845	Southport.	Liverpool.	New Orleans.	Put into Nassau, last sails, &c., Feb. 22	6,500	3,600	10,100
25	Hero	Hussey,	313	Bath.	1846	Nantucket.	Nantucket.	Wooling.	Total loss in Algon Bay, Jan. 31.	20,000	2,000	22,000
13	Hesperus	Dudley,	1619	Bedford.	1856	Boston.	Liverpool.	New York.	Put into St. Thomas, leaky, struck on bar.	42,000	10,000	52,000
28	Holspur	Johnson,	862	New York.	1857	New York.	New York.	Hong Kong.	Put into St. Thomas, leaky, sprung, Feb. 9	9,000	2,000	11,000
1	Isabella	Collin,	860	Wisconsin.	1853	New Bedford.	Manzanilla.	Falmouth, E.	Total loss at Pulo Penang, Dec. 16.	15,000	12,000	27,000
2	Isaac Walton	Morton,	437	Matapoisett.	1844	New Bedford.	Hong Kong.	England.	Total loss at Cape Corrientes, Cuba, Mar. 12	35,000	10,000	45,000
1	John Owens (Br.)	J. Brown,	1168	Nova Scotia.	1854	St. Johns, N.B.	Calcutta.	New Orleans.	Abandoned, Lat. 25° Lon. 89° Jan. 13.	60,000	42,000	102,000
23	Judith	Brown,	928	Damariscotta.	1853	New Orleans.	New York.	San Francisco.	Put into Rio Janeiro, in dist., and then Jan. 12	43,000	10,000	53,000
9	Kutusoff	F. A. Stahl,	410	New Bedford.	1854	New Bedford.	Liverpool.	Danlon.	Asb. n. Edgworth, must cut aw. (off), Mr. 21	15,000	5,000	20,000
22	Liverpool Packet	Crosby,	998	Boston.	1850	Bremen.	New York.	London.	Put into Falmouth, Eng., leaky, Feb. 5.	2,000	.....	2,000
12	Leonine	Bogora,	559	Vegasca.	1844	Bremen.	New York.	London.	Missing since Nov. 26th.	17,000	24,000	41,000
4	Masconomo	G. B. Swasey,	824	Maritime.	1845	Newburyport.	Liverpool.	Pensacola.	Put into Belfast, lost sails, &c. Feb. 22.	1,500	.....	1,500
15	Prince Arthur (Br.)	Rankin,	997	Dunbarton.	1855	Bath.	New Orleans.	Liverpool.	Asbore near, off, and at Key West, Mar. 7.	12,000	30,000	42,000
26	Peachontia	Delano,	1085	Bath, Me.	1855	Bath.	Calcutta.	New Orleans.	Put in Mauritius, in dis., Feb. 6.	8,500	6,000	14,500
20	Powen Tree	Worwell,	919	St. Johns, N.B.	1857	Liverpool.	Calcutta.	Calcutta.	Lost in Cameron Bay, Feb. 6.	43,000	35,000	78,000
12	Speedwell	Gibbs,	406	(Whaler.)	1853	Falmouth, E.	Calcutta.	Calcutta.	Asbore on Folly Isl. (off & at Charleston) Mr. 9	25,000	6,000	31,000
23	Susan G. Owens	Norton,	135	Baltimore.	1851	New Bedford.	Newport, E.	Manilla.	Lost on coast on voyage (ar. at M.) Dec. 22	3,000	.....	3,000
9	Tropic Bird	Smith,	217	Dartmouth.	1855	Dartmouth.	Greenock.	Kurrachee.	Abandoned, Lat. 20° N. Lon. 75° E. Dec. 22	28,000	15,000	43,000
15	Thos. Lowry (Br.)	Demister,	558	Dartmouth.	1855	Dartmouth.	Greenock.	Greenock.	Abandoned, Feb. 7.	42,000	64,000	106,000
10	Venelst (Br.)	Flett,	1004	St. Johns, N.B.	1852	New York.	Calico.	England, N. B.	Total loss on Cape Henry, Feb. 9.	28,000	52,000	80,000
19	Victory	Carlson,	672	Bath.	1848	Bath.	Calico.	Swansea.	Towed into Bristol, dismantled, Feb. 31.	2,000	2,000	4,000
19	W. D. Sewell	Trout,	740	Charlestown.	1850	Boston.	Calico.	Swansea.	Towed into Castle Hay, lost cargo, &c., Feb. 9	2,500	12,000	14,500
									81 Ships.	\$577,000	\$605,800	\$1,182,800
									Totals.			

March, 1861.

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SHIPS.	BARKS.	MASTERS.	TONS.	WHERE BUILT.	DATE.	MAIL FROM.	WHENCE FROM.	WHENCE TO.	DISASTERS.	VESEL AND FREIGHT.	CARGO.	TOTAL.
15	Atlas (Br.)	Main.	619	Nova Scotia.	1830	Cardiff.	Liverpool.	Mobile.	Put into Belfast, lost ashore, &c., Feb. 28.	\$1,000	.....	\$1,000
27	Columbus (Br.)	Anderson.	467	W. India.	1832	Falmouth.	Pensacola.	Dublin.	Aband. Lat. 34° 40' Lon. 73° 00', Mar. 16.	13,000	13,000	20,000
9	California (Am.)	Farach.	469	W. India.	1837	Tientsin.	Cardiff.	New York.	At Bermuda, in dis. and disch. Feb. 22.	4,500	8,000	7,500
11	Clanona (Wigh.)	Primmer.	233	Baltimore.	1836	Baltimore.	New York.	Gibraltar.	At Gibraltar, in dis. and, at salt, Feb. 19.	6,000	4,000	10,000
22	Corinto (Aut.)	Bannister.	430	Lussino.	1838	Lussino.	Genoa.	New York.	Put back to Gibraltar, leaky, &c., Feb. 17.	4,500	3,000	7,500
23	Dalvaga	Young.	430	Dalvaga.	1838	Lussino.	Genoa.	New York.	Total loss at Scammon's Lagoon.	12,000	1,000	13,000
16	Gongo (Br.)	Leckman.	420	Gronowick.	1840	Hamburg.	Richmond.	Bremen.	Cut by ice, and sunk in Lower West, Feb. 4.	29,000	45,000	27,000
11	Hamer	Yates.	420	Milbrook.	1840	Hamburg.	Richmond.	New York.	Aband. at sea, Lat. 41° Lon. 12° Feb. 13.	20,000	20,000	42,000
11	Hawatha	H. H. Hall.	373	Black Rock.	1836	New York.	Gabon.	New York.	Aband. at Plymouth, Eng. off.	9,000	20,000	23,000
16	Harvest Queen	Johnson.	396	New York.	1830	New York.	Buenos Ayres.	Boston.	Aband. at Cape Henry, Mar. 19.	8,000	1,500	4,500
11	H. H. Hall	Johnson.	292	Hingham.	1839	Provincetown.	Massena.	Baltimore.	Total loss on Cape Henry, Mar. 19.	10,000	5,000	15,000
16	H. H. Hall	Johnson.	313	Sourport.	1832	New York.	New York.	Liverpool.	Lost cargo, lost ashore, bulwarks, &c., Jan. 21.	4,000	7,000	13,500
27	J. J. Cobb	Webster.	378	Sourport.	1830	Baltimore.	New York.	Cardiff.	Put into Fyral, leaky, lost cargo, &c., Feb. 10.	1,000	2,500	3,500
12	Mary Leonard (Br.)	Kirk.	634	Yarmouth, N.S.	1834	Yarmouth.	Buenos Ayres.	Matanzas.	Total loss on Cruz del Padre, Mar. 16.	8,700	10,000	24,100
22	Nestor	Hoves.	498	Cherryfield.	1830	Boston.	Boston.	Alexandria, E.	At Gibraltar, mast sprang, &c., Feb. 10.	4,000	6,500	11,000
23	Nonpareil	Flan.	400	E. Boston.	1830	Boston.	Palermo.	Boston.	Masts cut away, &c., off N. Am., Mar. 22.	4,000	2,000	6,000
27	Ocean Guide	Woodward.	254	Portsmouth.	1834	Portsmouth.	Newport, E.	Galveston.	Aband. Lat. 38° Lon. 10° Feb. 14.	9,500	3,000	12,500
27	Palmer (Br.)	Christison.	365	Liverpool.	1839	Liverpool.	Honduras.	London.	Total loss near Key West, Mar. 15.	6,000	12,000	18,000
28	Sabrina (Br.)	Franch.	336	Yarmouth, N.S.	1835	Yarmouth.	London.	York.	Missing since Oct. 31.	22,500	13,000	35,500
29	Phos. Kibhan (Br.)	Crosby.	336	Yarmouth.	1835	Yarmouth.	London.	St. Johns, N.B.	Put into Machias, dismantled, Mar. 10.	4,500	2,500	7,000
1	Tosquin	Bennet.	407	Bath, Me.	1832	Boston.	Shanghai.	Japan.	Total loss near Hakodadi, Japan, Jan. 15.	35,000	12,000	47,000
13	Tom Corwin.	Batchelder.	250	Seymour.	1837	Boston.	Shanghai.	Schuyler.	Foundered off Wicklow Head, Feb. 9.	17,000	83,000	100,000
13	Yndolaza (Br.)	Norton.	895	Newcastle.	1837	Newcastle.	New York.	Gloucester, E.	Total loss on the reef near Trinidad, Mar. 7.	7,000	15,000	22,000
17	Warren	Blackwell.	401	Portland, Me.	1840	New Bedford.	Alexandria.	San Francisco.	Aband. at Breakers, near Cardiff, Feb. 6.	16,000	20,000	46,000
17	Warwick	Duvorgor.	437	Portland, Me.	1840	New Bedford.	Alexandria.	San Francisco.	At St. Catharines, in dis. leaky, &c., Jan. 1.	8,000	2,000	10,000
23 Barks.....Totals.										\$243,200	\$305,000	\$548,200
26	A. R. Moore	Ray.	180	Pittston, N. J.	1821	Chaboa.	Mobile.	Cuba.	Put in Nassau in distress, Feb. 26.	\$1,000	.....	\$1,000
18	Adeline Sprague	Smith.	211	Sumner, Mass.	1854	Boston.	Madrid.	Texas.	Total loss at Yereba, Jan. 30.	10,000	16,000	26,000
13	Aurale	Davis.	220	Charl'stown, M.	1849	Boston.	Jamaica.	Matanzas.	Put into Newport in distress, March 11.	1,000	1,000	2,000
19	Bonaparte	Young.	171	Machias.	1852	Machias.	Boston.	New York.	Put into Key West, leaky, March 1.	3,500	1,000	4,500
21	Hannah East.	Colburn.	257	Pole.	1841	Liverpool.	New York.	Savannah.	Put into New York, mast sprung, &c.	2,000	2,000	4,000
21	Homer (Br.)	Van.	134	Windsor, N. S.	1851	Windsor.	New York.	Dublin.	Aband. at Plymouth, Mass. off. March 22.	1,500	3,000	4,500
27	Iris	Parce.	242	Rockland.	1854	Bristol, E. I.	Cardenas.	New York.	Col. brig Madelon, lost in n. Matanzas, Feb. 17.	4,500	25,000	29,500
27	John E. Dow	Calby.	295	Brunswick, Me.	1846	Providence.	Wilmington, N.C.	New York.	Total loss near Cardenas, March 11.	9,000	24,000	33,000
15	Johanna (Haw.)	Krooster.	905	Durham.	1826	Greenville.	Newcastle.	Providence.	Abandoned, Lat. 37° Lon. 74° March 15.	8,000	8,000	14,000
20	Laurita	Brown.	100	Durham.	1846	New York.	Matanzas.	New York.	Abandoned, Lat. 38° Lon. 68° Feb. 21.	9,000	14,000	23,000
1	La Grange	Huff.	226	Gardner, Me.	1854	New York.	Cardiff.	San Juan, P.R.	Aband. at Wood Island, near San Juan, March 25.	3,500	6,000	9,500
At Cardenas, partly dismantled, Feb. 2.										1,700	.....	1,700

MARINE LOSSES FOR MARCH 1861. (CONTINUED.)

DATE.	BRIGS.	MASTED.	TONS.	WHERE BUILT.	DATE.	WHEE FROM.	WHEE TO.	DISASTERS.	VESEL AND FREIGHT.	CARGO.	TOTAL.
25	Leuis (Fr.)	Duessa,	168	La Roque,	1858	Bordeaux,	Senegal,	Put into Charleston in distress, March 21,	\$1,500	.....	\$1,500
27	Molokua.	J. Mitchell,	211	Eastport,	1858	Eastport,	Boston,	Abandoned, Lat. 34° Lon. 74°, March 20,	8,000	12,000	18,500
5	Messager (Br.)	Whipple,	231	Windsor, N.S.	1856	Windsor, N.S.	Boston,	Missing since Nov. 6,	10,500	52,000	62,500
11	Madra.	Morton,	281	Hallowell, Me.	1856	Havana,	Boston,	Col. W. B. Homer, put into Matanzas, Feb. 19,	500	.....	500
11	Mary D. Lane	R.A. Gardner,	387	Haddam, Ct.	1855	New York,	Charleston,	Abandoned, Lat. 38° Lon. 74°, Feb. 21,	14,000	30,000	44,000
12	Margo Park	Gill,	808	Bangor,	1854	Boston,	Montevideo,	Arrived at Montevideo in distress, Jan. 11,	8,000	1,800	9,800
26	Trentino	Presey,	150	Calais,	1851	Deer Isle,	Jacksonville,	Put into Nassau in distress, March 12,	1,700	2,000	3,700
28	Trenton	Greenham,	165	Eden, Me.	1852	Trenton,	Boston,	Put into Demarua, distressed, &c., Feb. 7,	1,500	.....	1,500
16	Thomas Denison	Tibbets,	180	Boothbay,	1851	Westport,	New Orleans,	Put into St. Thomas in distress, March 6,	3,000	3,000	7,000
26	Thomas Denison	Hathaway,	192	Deep Elvet, Ct.	1852	Norwich,	Cardenas,	Put into Nassau in distress, March 7,	2,700	1,500	4,200
21	Union State	Foxwell,	234	Hallowell, Me.	1856	Baltimore,	Savannah,	Put into Norfolk, leaky, Feb. 6,	2,000	1,000	3,000
21	Unona	G.F. Church,	218	Hallowell, Me.	1848	New York,	Trieste,	Put into Gibraltar, cond. and sold, Jan. 6,	4,500	4,500	9,000
5	Waltham	Clark,	184	Ellsworth,	1855	Ellsworth,	Boston,	Put into Newport, in dis. & distress, March 4,	2,900	.....	2,900
25	Wm. A. Dresser	Hatch,	197	Brewer, Me.	1853	Bangor,	Ponce, P. R.,	Put into St. Thomas, in distress, March 1,	1,500	1,500	2,700
25	Zillah (Br.)	Burab,	134	Nova Scotia,	1853	Montréal,	St. Johns, N.F.	Abandoned, Lat. 41° Long. 63° 10', Mar. 21,	4,500	15,000	19,500
27 Brigs. Totals,									\$116,700	\$293,600	\$410,300
7	Adelaide	Nickerson,	91	Selkirk,	1847	Boston,	Boston,	At St. Thomas, in distress, Feb. 14,	\$1,500	.....	\$1,500
15	A. L. Finell	Freeman,	176	Selkirk,	1855	Orleans, C. C.	Valencia,	Put into Bermuda, in distress, March 2,	2,400	8,500	10,900
15	Bucephalus	Bannister,	106	Provincetown,	1855	Newburyport,	Boston,	Put into Newport, in distress, March 7,	900	1,000	1,900
21	Blackbird	B.E. Compton	203	Norfolk,	1854	Norfolk,	Boston,	At Provincetown, w. masts sprung, Mar. 5,	1,000	.....	1,000
20	Belle	Layman,	149	Penns G. N.J.	1859	Penns G. N.J.	Galveston,	Put in Wilmington, S.C. lost sails, &c., Mar. 14	900	800	1,700
27	C. S. Lochman	Endicott,	240	P. Republic,	1860	Egg Harbor,	Baltimore,	Abandon, Lat. 39° 12' Lon. 75° 09', Mar. 17,	10,000	95,000	105,000
25	Catharine Beck	Shute,	217	Waldoboro,	1850	New York,	Belfast,	Ashore at Gloucester—off, March 24,	500	800	1,300
14	Cactus	Furber,	217	Greenpoint,	1850	New York,	New York,	Total loss on reef near Gila, Cuba, Mar. 6,	12,000	29,000	40,000
25	D. H. Saxton	Reuter,	345	Cleveland,	1852	Cleveland,	Marselles,	Ashore near Reel—off, March 9,	1,300	1,000	2,300
29	Dirigo	Cook,	348	Albany, N. J.	1855	Philadelphia,	New York,	Put into Savannah, in dis., leaky, Mar. 24,	2,000	2,500	4,500
25	D. F. Gale	Parkhurst,	81	Essex, Me.	1850	Nantucket,	Boston,	Total loss, drove ashore in harbor of G. Mar. 22,	1,900	.....	1,900
15	Enterprise	Plunkin,	105	Essex, Me.	1849	Nantucket,	Boston,	Total loss on Egg Rock, C. Cod, March 9,	1,500	2,000	3,500
14	Enoch Pratt	Sherman,	197	Fall River,	1846	Fall River,	New York,	Total loss on Curruck Inlet, March 13,	9,000	8,000	17,000
15	Penimore Cooper	.....	.....	.....	.....	.....	.....	Total loss off bar in Pedro River, Nov. 25,	2,000	.....	2,000
24	General Harrild	.....	.....	.....	.....	.....	.....	Total loss four m. N. of Barnegat, Mar. 20,	2,000	500	2,500
1	Grey Eagle	Spencer,	81	New Jersey,	.....	.....	.....	Ashore on Block Id.—off at Newport, Feb. 27,	500	800	1,300
16	Grecian	Hogarty,	147	Warren, Me.	1850	Westport, Me.	Pelhoe River,	Missing, Feb. 6,	1,000	.....	1,000
16	H. N. Stanwood	P. Gorman,	84	Salisbury,	1857	Laurens,	Boston,	Total loss on reefs at Inagua, Feb. 5,	4,000	.....	4,000
26	Havilla	Evans,	237	Machias,	1856	Gloucester,	Marjport,	Total loss on Dolliver's Neck, Mass., Mar. 21	1,500	.....	1,500
26	Hibernia	Brashaw,	99	Philpburg,	1847	Baltimore,	Inagua,	Total loss on Cape Lookout, Feb. 27,	2,000	2,000	4,000
7	Ida Mallot	Mulliner,	129	Patchogue,	1853	New York,	Savannah,	Put into Norfolk, in distress, March 10,	1,500	2,000	3,500
13	Israel H. Day	Chase,	250	Providence,	1855	Providence,	Providence,	.....	.....	.....	.....

RECORD OF HURRICANES, GALES, &c. Reported at New York during March, 1861.*

DATE.	DESCRIPTION.	DIRECTION.	DATE OF OCCURRENCE.	LOCATION, LAT. AND LONG., &c.	BY WHAT VESSEL REPORTED.	MASTEE.	WHERE FROM.	WHERE TO.	REMARKS.
1	Heavy Gale,	W.N.W.	February 15,	Off Cape Hatteras,	Schr. Harriet Newell,	Sherman,	Zara,	New York,	Lost sails and spar, &c.
2	do. do.	W.N.W.	February 24,	North of Cape Hatteras,	Sp. Washington Beech,	Pescud,	Talcahuana,	Baltimore,	Lost sails and boat.
3	do. do.	Not reported,	Feb. 25, 36,	Lat. 31° to Lat. 34°.	Bark Virginia Estrella,	Wilkins,	St. Johns,	New York,	Lost headstays and sails.
4	do. do.	do.	About Jan. 1,	Near Santos,	Schr. Samuel,	Jones,	Santos,	New York,	Lost sails, and junky.
5	Hurricane,	do.	About Feb. 1,	Lat. 49° 47' lon. 25° 50'.	Ship Revenue,	Ottwell,	Liverpool,	New York,	Left Liverpool Jan. 13.
6	Heavy Gale	do.	January 5,	Lat. 39° S. long. 45°.	Brig Waltham,	Clark,	Buenos Ayres,	Boston,	Lost spar, sails, &c.
7	do. do.	N.W. & S.E.	On the 5th,	Lat. 39° S. long. 45°.	Brig Eliza Bares (Br.),	Cooper,	Buenos Ayres,	New York,	200 m. fr. 8 th Hook 16 d. ago.
8	do. do.	W.N.W.	Dec. 20-24,	Lat. 25° S. lon. 74°.	Ship Great Republic,	Limburner,	New York,	San Francisco,	Left N.Y. Oct. 24, at 8 P. Feb. 6
9	do. do.	E.N.E. & N.N.E.	Dec. 25,	Lat. 25° 49' lon. 53°.	Ship Sparkling Sea,	Wells,	Buenos Ayres,	San Francisco,	Lost sails & put in St. Thomas.
10	do. do.	Not reported,	Dec. 25,	Off River Plate,	Ship Kitefoot,	F. A. Hall,	New York,	San Francisco,	Lost mast, &c., put into Rio.
11	do. do.	S.W. to N.W.	February 15,	170 miles from Sandy Hook,	Ship Carrier Dove,	Watson,	Calico,	New York,	Blown off, sprung spar, &c.
12	do. do.	W.	Most of Nov.,	S. of Cape Hatteras,	Sir. Potomac,	Raymond,	Glasgow,	New York,	Left Savannah 9th.
13	do. do.	S.E.	March 9, 10,	Lat. 34° 16' lon. 74°.	Bark Levantier (Br.),	Udaway,	Calcutta,	New York,	Many disasters reported.
14	Hurricane,	S.E. to S.W.	March 9, 10,	Lat. 34° 16' lon. 74°.	Ship Jackson Light,	On,	Glasgow,	New York,	Many disasters reported.
15	do. do.	S.E. to S.W.	Feb. 18, 20,	Off Tuckah,	" Overton Stewart,	Orin,	Liverpool,	Belize,	Put back to Liverpool.
16	do. do.	S.E. to N.N.W.	February 24,	Off Baltimore,	Bark Ann Wellington,	Prentiss,	Baltimore,	Liverpool,	Shifted cargo. Arr. L. Feb. 21.
17	Heavy Gale,	S.E. to N.N.W.	March 9,	Lat. 34° 16' lon. 74°.	" N. Stowers,	Jackson,	Buenos Ayre	New York,	Lost back sails, &c.
18	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Lost head and catwater.
19	Hurricane,	S.E.	March 9,	Lat. 34° 16' lon. 74°.	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Put into Newport.
20	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Lost spar, sails, &c.
21	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Stove board, &c.
22	Heavy Gale,	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Started deck load, &c.
23	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Lost deck load, boom, &c.
24	Heavy Gale,	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Lost topmast and boom.
25	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Ar. at Dungeness.
26	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Lost spar, sails, &c.
27	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Lost one man.
28	Heavy Gale,	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Put into Bermuda.
29	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Lost one man.
30	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Barometer 29.3.
31	Heavy Gale,	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Stove house, filled cabin, &c.
32	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Lost deck load, &c.
33	Heavy Gale,	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Put into New York.
34	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	N.W. gale of S. F. Feb. 8.
35	do. do.	S.E.	March 9,	Off Cape Hatteras,	" A. L. Fennell,	Stewers,	Matanzas,	New York,	Lost boat, &c.

* March has been noted for the gales of the 9th and 15th. Nearly every arrival from Europe has reported heavy westerly gales. The arrivals from West Indies and other southern ports report heavy northerly gales. A number of vessels have been abandoned about the 15th to the 20th. The month has been remarkable for the number of disasters to schooners and sailing vessels, as well as W. India traders. The gale of the 9th caused much damage on the coast, and in harbors from New York eastward.

DESCRIPTION.	DIRECTION.	DATE OF OCCURRENCE.	LOCATION, LAT. AND LONG., &c.	BY WHAT VESSEL REPORTED.	MARTEL.	WHICH EDUL.	WHERE TO.	REMARKS.
19 Heavy Gale,	N.E.	March 13,	Lat. 37° (N.W. 2 to 4 fr. lat. 28°)	Ship Sword-Fish,	Grandall,	Shanghai,	New York,	Light winds to Lat. 26°
20 do. do.,	N.E.	March 14,	10 miles S. Sandy Hook,	Br. Princess Royal (Dr.)	Newbold,	Hermuda,	New York,	Driven S. to Lat. 25° 41'
21 do. do.,	N.E.	Feb. 24,	Lat. 29° 08', lon. 71° 20'	Ship Dunbar,	Young,	Boston,	Savannah,	Put into New York.
22 do. do.,	N.E.	March 15,	Off Sandy Hook,	Ship Emerald,	Cook,	Leopold,	New York,	W. gales whole passage.
23 do. do.,	S.E.	March 9,	Lat. 39° 12', lon. 65° 03'	Brig Clatham,	Simpson,	Malta,	Boston,	Off Chatham 18, SE. to N.W. g. 1.
24 do. do.,	N.E.	March 9,	9 days out from Boston,	Sir. Young Rover,	Hamphrey,	Boston,	Leighorn,	Lay to three days.
25 Heavy Gale,	S.E. to S.	March 9,	Lat. 38° 30', lon. 71° 42'	Sch. James M. Holmes,	Brewster,	Saga,	New York,	N.E. gale 20 to S.E. Abt. 15th.
26 do. do.,	S.E. to N.W.	March 9,	Off Cape of Chesapeake,	Bark Clinton,	Lewis,	Palermo,	Baltimore,	On soundings since 16th inst.
27 do. do.,	N.W. to S.W.	March 15,	Off Bermuda and New York	Sch. Nabob,	Baxter,	Funchow,	New York,	Double reefed last six days.
28 do. do.,	N.W. to S.W.	March 16,	Lat. 45° 29', lon. 73° 10'	Sch. J. L. Darling,	Ferrel,	Rio Grande,	New York,	Ex. S.E., N.W., & N.E. gales.
29 do. do.,	W to N.W.	March 16,	Lat. 37° 44', lon. 65° 27'	Sch. Dundalk (Dr.),	Kierman,	Kingson, Ire.,	New York,	W. gales the whole passage.
30 do. do.,	N.E.	March 15,	Off Cape Delaware,	Sch. Danville,	Chesler,	Richmond,	New York,	Louis Jannessa lost overbd.
31 Heavy Gale,	S.W.	March 16,	In North Atlantic,	Sch. Wild Pigeon,	Marshall,	Talcabano,	New York,	N.W. gales since 16th inst.
32 do. do.,	N.W. to N.N.W.	March 16,	Lat. 28° 10', lon. 73°	Bark Acme,	Campbell,	Vera Cruz,	New York,	Heavy N. & E. gales on voy.
33 do. do.,	N.W. to N.N.W.	March 16,	Off Hatteras,	Sch. Mary E. Pierce,	Smith,	Cardenas,	New York,	Stove 60 lib. molasses on deck.
34 do. do.,	N.W. to N.N.W.	March 16,	Lat. 31° 59', lon. 73° 15'	Brig Louise (Fr.),	Ducasse,	Cardenas,	New York,	Put back to Charleston.
35 do. do.,	N.W. to N.N.W.	Feb. 15,	Lat. 47° 10', lon. 90°	Ship Wallace,	Lane,	Liverpool,	New York,	Started Cutwater, &c.
36 Hurricane,	N.W.	March 15,	Lat. 36° 10', lon. 74° 12'	Ship Far West,	Pace,	New Orleans,	New York,	Barometer 24.73.
37 Heavy Gale,	N.W. to N.E.	March 15,	In North Atlantic,	Bark Henry Shelton,	Ajello,	Palermo,	New York,	Heavy westerly gales.
38 do. do.,	N.W. to N.E.	March 15,	Off Cape Hatteras,	Mark Louise,	Benton,	Palermo,	New York,	Heavy N.W. gales (Bar. 28.25)
39 do. do.,	Not reported,	March 15,	Off Cape Hatteras,	" "	Davis,	Fajardo, P. R.,	New York,	Lost mast, &c.
40 do. do.,	N.E.	March 15,	Lat. 35° 32', lon. 73° 22'	Sch. J. L. Rowman,	Eay,	Palermo,	Jacksonville,	Abandoned, March 20.
41 do. do.,	N.E.	March 15,	In Gulf Stream,	" Potomac,	Seaton,	Palermo,	New York,	Left 1700 boxes fruit.
42 do. do.,	N.W.	March 21,	Lat. 35° 10', lon. 74° 50'	" E. A. Chase,	Chase,	Saga,	New York,	Left 1700 boxes fruit.
43 Heavy Gale,	N.W.	March 21,	Lat. 36° 30', lon. 70°	Brig John Stevens,	Milliken,	Cardenas,	New York,	Gale lasted 56 hours.
44 do. do.,	N.W.	March 21,	Lat. 38° 45', lon. 70° 30'	Sch. Georgia,	Packard,	Virginia,	Tuamanga,	Put in New York in distress.
45 do. do.,	N.W.	March 21,	Lat. 40° 10', lon. 70° 30'	Bark Patricia (Dr.),	J. S. Leighton,	Goldara,	Boston,	Lost Captain's overboard.
46 do. do.,	N.W.	March 21,	From Lat. 30° to New York	Ship Derby,	Hutchinson,	San Francisco,	New York,	Crossed Equator March 3.
47 do. do.,	N.W.	March 21,	Lat. 44° 30', E. of Banks,	Brig Graham's Polley,	Norton,	Amoy,	New York,	Took off crew of brig Zillah.
48 do. do.,	N.W.	March 21,	Lat. 37° 40', lon. 73° 30'	Sch. Pisona,	Colby,	Amoy,	Providence,	Abandoned March 15.
49 do. do.,	N.W.	March 21,	Lat. 38° 20', lon. 73° 30'	Sch. Pisona,	Colby,	Amoy,	Providence,	Abandoned March 15.
50 do. do.,	N.W.	March 21,	Off Cape Hatteras,	Sch. Pisona,	Colby,	Amoy,	Providence,	Abandoned March 15.
51 do. do.,	N.W.	March 21,	199 miles S.E. of Hatteras,	Sch. Pisona,	Colby,	Amoy,	Providence,	Abandoned March 15.
52 do. do.,	N.W.	March 21,	Not reported,	" "	Colby,	Amoy,	Providence,	Abandoned March 15.
53 do. do.,	N.W.	March 21,	Lat. 35° 18', lon. 70° 24'	" Witch Queen,	Enmore,	Amoy,	Providence,	Abandoned March 15.
54 do. do.,	N.W.	March 21,	Lat. 36° 10', lon. 74° 30'	" M. E. Carlisle,	Stratton,	Amoy,	Providence,	Abandoned March 15.
55 do. do.,	N.W.	March 21,	Lat. 34° 10', lon. 74° 50'	" Squid,	Elliot,	Amoy,	Providence,	Abandoned March 15.
56 do. do.,	N.W.	March 21,	Not reported,	Ship Danube,	Dixey,	Amoy,	Providence,	Abandoned March 15.
57 do. do.,	N.W.	March 21,	Lat. 31° 20', lon. 68°	" "	Dixey,	Amoy,	Providence,	Abandoned March 15.
58 do. do.,	N.W.	March 21,	Off Bermuda,	Brig Frederic Butler,	Bartlett,	Amoy,	Providence,	Abandoned March 15.
59 do. do.,	N.W.	March 21,	Lat. 30° 30', lon. 73° 30'	Sch. Frederic Dyer,	Gilmore,	Amoy,	Providence,	Abandoned March 15.
60 Hurricane,	N.E. to N.W.	March 15,	Lat. 30° 30', lon. 74° 20'	Bark Charles Smith,	Gilbert,	Amoy,	Providence,	Abandoned March 15.

LOSS OF LIFE AT SEA.

RECORD OF LIVES LOST AT SEA AND AT WRECKS, REPORTED DURING MARCH, 1861.

* * The First Column refers to the Date of the New York Paper containing the Report

DATE OF REPORT.	NO. OF PERSONS	NAMES, ETC.	BY WHAT VESSEL.	MASTER.	LOCATION OF LOSS.	DATE OF LOSS.	WHERE FROM.	WHERE BOUND.
1	11	Men, {	Bark Tonguin,	Bachelor,	Off Wicklow Head,	February 9,	Glasgow,	Santa.
2	1	Woman, }	Ship Masconomo,	Geo. B. Swasey,	Missing since	November 26,	New York,	London.
3	15	Crew of	Bark Fenelon,	Whiting,	Lost overboard,	February 16,	Leghorn,	New York.
4	4	Crew of	Brig Macassar, (Br.)	Whiting,	Missing since	November 8,	London,	Boston.
5	9	John Rynd,	Bark John Wesley,	Smith,	Lost over, Lat 38° 30', Lon. 71° 34'	January 20,	New York,	Liverpool.
6	8	James Lewis,	Brig Missionary, (Br.)	Neal,	Lost over, Lat 28° 34', Lon. 40° 36'	February 1,	Sunderland,	New York.
11	1	James Walsh,	Ship Columbia,	Bryant,	Lost overboard,	February 1,	Liverpool,	New York.
11	1	Men,	Ship Ceres,	Humphreys,	(No particulars)	.....	New Orleans,	Fleetwood.
11	4	Henry Granger,	Brig Regina, (Br.)	Skelton,	Lost over, Lat 84°, Lon. 71°	February 16,	Falmouth,	New York.
13	1	John R. Sommers,	Ship West Point,	Child,	Lost overboard, off St. Helena.	March 10,	Liverpool,	New York.
16	1	Isaac Holt,	Schr. Pearl,	Leak,	Lost over, Lat 41° 6', Lon. 66° 54'	March 9,	Baltimore,	Savannah.
18	1	Joseph Bond,	Schr. Truro, (Br.)	Cartin,	Lost overboard,	March 10,	Halifax,	New York.
19	1	John Corden,	Ship Samuel C. Grant,	Hinckley,	Wrecked near Scituate,	February 11,	Liverpool,	New York.
19	1	Crew of	Schr. Rialto,	Colbeth,	Missing since	March 16,	Macbia,	Boston.
19	8	Schr. Susan Young,	Schr. Susan Young,	Anth. Medeiros,	Wrecked near Scituate,	February 6,	Gloucester,	Fishing.
19	9	Crew of	Schr. H. N. Stanwood,	Pat. Gorman,	Missing since	February 6,	Gloucester,	Fishing.
19	8	Crew of	Schr. White Swallow,	Peter Nelson,	Missing since	February 6,	Gloucester,	Fishing.
19	9	Crew of	Bark Harvest Queen,	Wheeler,	Wrecked near Scituate,	February 6,	Gloucester,	Fishing.
20	6	Crew of	Ship London,	Hurlbut,	Lost overboard,	March 16,	Buenos Ayres,	Boston.
23	1	William Ogler,	Schr. Sarah Jane,	Milliken,	Wrecked on Isle of Shoals,	March 4,	Rockland,	New York.
23	33	Capt. Milliken,	Schr. Sarah Jane,	Milliken,	Wrecked near Gilgaw, Cuba,	March 18,	Rockland,	Boston.
23	1	Seaman,	Schr. Cactus,	N. M. Russel,	Wrecked near Scituate,	March 6,	Brasos,	New York.
25	1	Capt. Walter H. Hines,	Schr. Belle Brandon,	W. H. Hines,	Wrecked near Scituate,	March 21,	New York,	Calda.
25	1	Crew of	Schr. Susan Baker,	Gookin,	Lost from boat near Antwerp,	March 22,	Elizabethport,	Saco.
25	3	Crew of	Ship A. B. Thompson,	Small,	Lost from boat near Antwerp,	March 8,	Off Antwerp,	.....
25	4	Seaman,	Ship Danube,	Healy,	Lost by collision and sinking of ship,	March 6,	New Orleans,	Liverpool.
26	1	Edward Martin,	Bark Queen of the Fleet, (Br.)	Staples,	Lost overboard,	March 12,	Attakapas,	Baltimore.
26	24	Edmond Jackson,	Bark Genierosa,	Hilton,	Lost by collision and sinking of ship,	March 15,	Glasgow,	New York.
27	1	Capt. J. S. Leighton,	Brig Queen of the Fleet, (Br.)	Cole,	Lost overboard,	March 22,	Cimbucoosa,	Boston.
27	37	Edmond Jackson,	Brig Queen of the Fleet, (Br.)	J. S. Leighton,	Lost over, Lat 40° Lon. 66°	March 19,	Caldera,	Boston.
27	37	Edmond Jackson,	Brig Queen of the Fleet, (Br.)	J. S. Leighton,	Lost over, Lat 33° 55' Lon. 31°	February 28,	Liverpool,	Baltimore.
28	1	Henry Pascoe,	Ship Sir J. Franklin,	Dempsey,	Lost over, Lat 44° 30', Lon. 31° 34'	February 28,	Liverpool,	Baltimore.
28	33	George King,	Ship Devonshire,	Anderson,	Lost overboard,	March 30,	London,	New York.
29	1	Mahomet Menda,	Ship Francis B. Cutting,	Maloney,	Fell from aloft,	March 21,	Harve,	New York.
30	1	Jefferson Pierce,	Ship Lanmerger,	Coffin,	Fell from aloft,	February 8,	Calda,	New York.

FOREIGN COMMERCE OF THE STATE OF NEW YORK.
FROM OCTOBER 1, 1820, TO JULY, 1, 1860.

YEARS ENDING SEPT. 30.	EXPORTS.			IMPORTS.	TONNAGE CL'D.	
	DOMESTIC.	FOREIGN.	TOTAL.	TOTAL.	AMERICAN.	FOREIGN.
1821	\$7,896,605	\$5,954,818	\$13,851,423	\$22,622,246	153,174	10,720
1822	10,987,167	6,113,815	17,100,982	35,445,693	185,666	17,784
1823	11,263,995	7,675,995	19,039,990	29,421,349	192,521	23,558
1824	13,523,654	9,965,480	23,529,134	36,118,738	222,271	18,149
1825	20,651,553	14,607,708	35,259,261	49,639,174	255,878	19,851
1826	11,496,719	10,451,073	21,947,791	38,115,680	214,664	21,865
1827	18,920,627	9,913,510	28,834,137	38,719,644	239,968	33,375
1828	12,362,015	10,415,084	22,777,099	41,927,793	217,118	42,373
1829	12,066,561	8,082,450	20,149,011	34,743,807	219,674	32,855
1830	13,613,373	6,079,705	19,693,078	35,624,070	222,341	36,574
Total,	\$137,361,179	87,972,177	215,333,356	363,379,568	2,135,970	256,592
1831	15,736,118	9,900,096	25,636,214	51,077,417	264,331	73,444
1832	15,057,350	10,943,685	26,001,035	53,214,409	242,749	101,067
1833	15,411,296	9,983,921	25,395,217	55,918,449	284,175	158,566
1834	18,349,469	11,662,545	30,012,014	73,188,594	361,606	228,650
1835	21,707,367	8,887,397	30,594,764	83,191,305	569,385	343,078
1836	19,816,520	9,104,118	28,920,638	113,353,416	477,524	355,591
1837	16,083,999	11,254,450	27,338,449	79,201,792	438,006	404,784
1838	16,432,433	6,576,083	23,008,516	63,453,906	515,759	323,768
1839	23,296,995	9,971,104	33,268,099	92,832,438	609,726	320,666
1840	22,676,609	11,587,471	34,264,080	60,440,750	513,302	343,114
Total,	\$180,058,526	92,529,665	272,588,191	753,921,699	4,346,975	2,672,623
1841	24,279,608	8,800,225	33,079,833	75,713,426	600,307	335,241
1842	20,739,256	6,307,492	27,046,748	57,376,004	554,939	340,530
1843*	13,443,334	3,319,480	16,762,814	31,206,740	331,231	174,374
1844	26,009,177	6,532,363	32,541,540	65,079,518	973,313	414,625
1845	35,259,904	10,345,394	45,605,298	70,909,085	926,230	414,633
1846	29,533,266	7,349,547	36,882,813	74,254,358	1,120,944	435,942
1847	44,316,430	5,027,333	49,343,763	84,167,352	1,040,840	453,755
1848	33,771,309	14,579,948	48,351,257	94,623,141	1,004,316	705,873
1849	36,733,215	9,234,335	45,967,550	92,067,869	1,363,643	734,514
1850	41,502,300	11,202,959	52,705,259	111,129,524	1,411,567	737,539
Total,	\$301,315,779	86,507,156	387,822,935	757,571,340	9,379,470	4,851,571
1851	63,104,543	17,902,477	81,007,020	141,546,533	1,555,313	375,319
1852	74,043,561	13,441,575	87,485,136	132,239,306	1,570,927	390,798
1853	66,080,355	12,175,385	78,255,740	173,270,999	1,950,902	1,034,743
1854	105,551,740	16,982,906	122,534,646	195,427,938	1,913,317	1,035,154
1855	96,414,808	17,316,430	113,731,238	164,776,511	1,861,639	1,140,197
1856	109,343,509	9,262,991	118,606,500	310,163,454	2,136,577	1,355,577
1857	119,197,301	15,065,997	134,263,298	336,493,435	2,135,670	1,405,311
1858	89,089,790	19,301,184	108,390,974	173,475,736	2,135,385	1,173,568
1859	104,726,545	12,313,379	117,039,924	232,131,349	2,654,134	1,737,706
1860	126,080,967	18,494,323	144,575,290	343,439,377	3,339,035	1,190,750
Total,	\$959,017,189	154,297,506	1,113,314,695	1,915,154,133	21,315,193	11,436,517

* 9 months to June 30, and the fiscal year from this time begins July 1.

RECAPITULATION OF FOREIGN COMMERCE OF NEW YORK AND THE U. S. FOR FIVE YEARS.

YEAR.	IMPORTS STATE OF N. Y.	OTHER STATES.	TOTAL, UNITED STATES.	PER CENT.
1855-1856	\$210,160,454	\$104,479,463	\$314,639,917	66.79
1856-1857	236,493,483	134,396,656	370,890,141	63.58
1857-1858	173,475,394	104,137,414	277,612,808	62.15
1858-1859	229,131,349	109,536,731	338,668,080	67.65
1859-1860	245,439,377	113,676,377	359,115,754	68.61

Five years	\$1,102,300,901	556,376,696	1,658,677,597	66.40
Average five years	\$220,460,180	111,255,339	331,715,519	

YEAR.	EXPORTS STATE OF N. Y.	OTHER STATES.	TOTAL, UNITED STATES.	PER CENT.
1855-1856	\$119,111,500	\$307,953,408	\$427,064,908	27.43
1856-1857	124,303,298	293,157,334	417,460,632	27.14
1857-1858	108,340,924	216,303,496	324,644,420	25.87
1858-1859	117,539,335	239,349,637	356,788,972	23.94
1859-1860	145,555,449	254,566,347	400,121,796	26.33

Five years	\$535,350,996	1,246,180,779	1,781,531,775	26.36
Average five years	\$107,070,199	249,236,154	356,306,353	

*Statement showing the comparative losses on Ships and Freights and on
Cargoes, during the year 1860.*

I. LOSSES ON SHIPS AND FREIGHTS.

MONTHS.	<i>Ships.</i>	<i>Steamers.</i>	<i>Barks.</i>	<i>Brigs.</i>	<i>Schooners.</i>	<i>Total.</i>
Jan.,...	\$ 677,000 ..	\$ 26,500 ..	\$ 319,200 ..	\$ 95,000 ..	\$ 60,600 ..	\$ 1,178,300
Feb.,...	571,500 ..	306,000 ..	272,000 ..	47,000 ..	98,500 ..	1,295,000
March,.	552,000 ..	524,000 ..	253,500 ..	105,250 ..	102,700 ..	1,537,450
April, .	379,000 ..	110,000 ..	161,000 ..	57,500 ..	75,600 ..	783,100
May, ..	640,500 ..	70,500 ..	105,500 ..	52,500 ..	77,300 ..	946,300
June, ..	288,000 ..	144,000 ..	98,700 ..	57,000 ..	25,600 ..	613,300
July, ..	225,000 ..	306,000 ..	129,200 ..	38,100 ..	50,900 ..	749,200
Aug.,...	200,000 ..	70,000 ..	133,000 ..	50,600 ..	40,300 ..	493,900
Sept.,..	553,000 ..	240,000 ..	58,100 ..	54,500 ..	71,000 ..	976,600
Oct.,...	666,000 ..	750,000 ..	199,000 ..	71,600 ..	72,400 ..	1,759,000
Nov.,...	536,000 ..	836,500 ..	190,500 ..	50,500 ..	186,600 ..	1,800,100
Dec., ..	590,000 ..	330,000 ..	110,250 ..	62,200 ..	100,300 ..	1,192,750
Total, ..	\$ 5,878,000	\$ 3,713,500	\$ 2,029,950	\$ 741,750	\$ 961,800	\$ 13,325,000

II. LOSSES ON CARGOES.

Jan.,...	\$ 545,800 ..	\$ 38,000 ..	\$ 867,500 ..	\$ 126,000 ..	\$ 73,600 ..	\$ 1,650,900
Feb.,...	420,000 ..	342,800 ..	264,500 ..	11,600 ..	75,600 ..	1,114,000
March,.	492,000 ..	696,000 ..	386,000 ..	186,100 ..	134,400 ..	1,894,500
April, ..	720,000 ..	242,000 ..	376,600 ..	66,400 ..	75,700 ..	1,480,700
May,...	972,200 ..	61,000 ..	71,000 ..	56,200 ..	83,100 ..	1,243,500
June, ..	542,000 ..	19,000 ..	158,500 ..	43,500 ..	96,000 ..	859,000
July, ..	241,000 ..	1,013,000 ..	292,000 ..	105,000 ..	11,000 ..	1,662,000
Aug.,...	91,000 ..	15,000 ..	160,000 ..	147,000 ..	49,400 ..	462,400
Sept., ..	665,500 ..	140,000 ..	55,000 ..	66,000 ..	33,100 ..	959,600
Oct.,...	687,000 ..	150,000 ..	113,000 ..	35,000 ..	23,000 ..	1,013,000
Nov.,...	525,000 ..	618,000 ..	187,500 ..	27,900 ..	63,500 ..	1,416,900
Dec.,...	1,076,500 ..	50,000 ..	76,300 ..	24,900 ..	72,800 ..	1,300,500
Cargoes,	\$ 6,978,000	\$ 3,379,800	\$ 3,007,900	\$ 895,600	\$ 796,300	\$ 15,057,000
Vessels,	5,878,000	3,713,500	2,029,950	741,750	961,800	13,325,000
	\$ 12,856,000	\$ 7,092,800	\$ 5,037,850	\$ 1,637,350	\$ 1,758,000	\$ 28,382,000

1861.

Jan.,...	\$ 1,906,000 ..	\$ 309,000 ..	\$ 419,500 ..	\$ 146,600 ..	\$ 150,000 ..	\$ 2,931,100
Feb., ..	1,137,500 ..	427,300 ..	472,500 ..	148,800 ..	217,700 ..	2,403,700
March,.	1,152,800 ..	169,500 ..	528,200 ..	350,800 ..	505,800 ..	2,706,600

2 mos., 1861.

Total, ..	\$ 4,196,300	\$ 905,700	\$ 1,420,200	\$ 645,700	\$ 873,500	\$ 8,041,400
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3 mos., 1860.

Total, ..	3,258,800	1,932,800	2,362,700	570,950	545,400	8,670,150
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1859.

Cargoes,	\$ 9,904,160	\$ 5,939,500	\$ 2,438,100	\$ 1,312,800	\$ 958,860	\$ 20,553,420
Vessels,	7,252,252	5,322,000	2,097,800	950,400	1,080,900	16,702,752

Year 1859.

Total, ..	\$ 17,156,412	\$ 11,261,500	\$ 4,535,900	\$ 2,263,200	\$ 2,039,160	\$ 37,256,172
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THE PHYSICAL GEOGRAPHY OF THE SEA AND ITS METEOROLOGY.

COMMANDER MAURY has long been known by the practical, useful and comprehensive character of his nautical compilations and original writings. Assiduously laboring for many years, aided by scientific professors as well as by experienced practical men, he has done ample justice to the confidence and liberality of the United States. Successive editions of his *Sailing Directions* and *Charts*, in number many thousands, have been widely and well distributed, gratuitously, among those who are responsible for life at sea—whose business is on the ocean. We were informed, at a meeting of the Royal Geographical Society, that more than seven hundred quarto volumes and four thousand large charts have been thus dispersed among sea captains and instructors in maritime affairs, besides others in Great Britain and Ireland; while a proportionate number has been distributed in Holland, France, Portugal, Spain and Italy, above and beyond the much larger supply similarly granted to every United States ship of war, and to every merchantman willing to coöperate in observing.

Not only has a great amount of available knowledge been thus circulated directly, but a spirit of observation, a habit of noting and comparing, has increased most advantageously during late years among officers at sea—indirectly consequent on the acquisition of such knowledge as it has been the object of Commander MAURY, as it was likewise of our own Admiral BEAUFORT, to collect, digest and diffuse. We refer especially to our late Admiralty Hydrographer, by whose sagacity, talent and perseverance all maritime nations have benefited very generally.

After thus rendering special service to the maritime world, the various publications that have issued from the National Observatory at Washington have been submitted, by its indefatigable superintendent, to a process of elaborate selection and condensation, out of which, with much new matter, has resulted the present well-printed, clearly-arranged and most interesting, as well as useful, octavo volume. A careful perusal has shown us the necessity of noticing a few weak points—for some such, of course, there are—lest inexperienced persons should be led into occasional difficulties, even by so admirable a general guide.

That a work essentially maritime should be heralded with the word "Geography" has occasioned doubt—a feeling which has soon yielded, however, to the reflections that the term includes all the world's surface, the greater part of which is covered by sea—and that it has the sanction of HUMBOLDT and HERSCHEL. In the almost overwhelming aggregation of ideas suggested by even a superficial glance through the table of contents, it is hard to eliminate the most striking, and to comment on those alone, briefly, without digressing into a string of essays. In truth, it is a text-book for many a long discourse.

In the first chapter are explanations and illustrations of oceanic and atmospheric phenomena, as pleasant to read as worthy of their writers—one being the lamented Dr. BUYS. But in treating of the tides, some reference to the later researches and views of WHEWELL and HERSCHEL is desirable. A perusal of the article, "Physical Geography," in the

present edition of the *Encyclopædia Britannica*, and reference to the consecutive essays on the tides, which have been so luminous to seamen, show that those authorities are indisposed to attribute tidal results in northern seas to the sole or principal effect of a great tide-wave generated in the expanse of the southern ocean. They advert to a westerly and returning movement in mass, depending on depth and width of water, the attractions of moon and sun, and the obstacles opposing a continuous westerly wave. Such an undulation was described long ago by *HERSCHEL* as "exceedingly broad and excessively flat." It has the least sensible effect near the middle of the ocean; but is evidenced by the impulse given near a shelving shore, or an estuary where the sea has a positive current, and, therefore, a momentum, additional to the merely local, and (unless opposed and broken) vertically circuitous motion of a pure undulation or wave of water.

Horizontal or lateral movements, occasioned by obstructions of continents, islands or shallows, to great tidal waves, may have far more effect, geologically and on climates, than has hitherto been noticed. There is an impulse in one direction, towards the west, after the attracting bodies—moon and sun—greater than the returning or equilibrating action towards the east; and this, continued incessantly, must cause a preponderance of oceanic movement westward. Do we not see the results in comparative heaping or forcing of water into the Gulf of Mexico, towards the Indian Archipelago and the east coast of Africa? And are there not currents setting from those regions northward or southward, if not both, and eastward again where impeded and circumscribed—such as the Gulf Stream, the Japanese current, the South Pacific, South Atlantic and Lagoon currents? These currents, originated by consecutive tidal impulses, are doubtless strengthened and promoted by prevalent winds, especially the perennial and the monsoons.

The depths of ocean, their conditions and their temperatures become more and more subjects of interest as we gradually approximate towards accurate knowledge of them, and as our requirements oblige us to investigate their mysteries. Commander *MAURY*'s pages on these recondite secrets are full of valuable ideas.

He had the satisfaction (during his too brief visit to London, a few days ago) of meeting those who had just brought living creatures from more than seven thousand feet below the sea, and of inspecting an ingenious device for ascertaining temperature at any depth, irrespective of pressure or condensation. It is on the principle of a metallic barometer, so far as having *plates* of metal that expand or contract according to temperature, their ends working a lever which ranges through a graduated arc, carrying, either way, passive indexes by which extreme temperatures are shown on similar arcs. The water has free access through this new apparatus. Excellent advice and sound opinions are given by our author respecting electric wires and their coverings. But he ascribes the perishing of their absurd iron armature to galvanic action alone, namely, that caused by sea-water, with the iron and copper of the wires. In many, if not in most instances, there is a rapid oxidation of the iron, wherever covered by water only, and not excluded by mud, or otherwise, from air, *in the water*, in addition to direct and destructive action of copper ore, or veins, cropping out at the bottom of the sea near land. Instances are on record of chain cables ruined, in a few weeks only, by overlying a rocky

patch of copper ore. Where a metallic defence against chafing is indispensable, as over rocks, in shallow water, copper only should be used.

The officer recently employed by France to examine and report on submarine telegraphy in general, has stated to his government that the best insulator is caoutchouc, and that a wire of large section is better than smaller wires. Experiments are in favor of india-rubber, as now applied, certainly; but is it probable that any vegetable substance will last long under water—especially sea-water—abounding in animal life and a variety of material ingredients? Some combination of vitreous, although rather ductile and flexible character, insulating and durable, may yet be devised by chemists and electricians.

Trials, only just concluded, with wires varying in their sectional area, have occasioned a hasty conclusion against other evidence of a different nature, that the "conductivity" of a small wire equals that of one larger in section.

In these experiments, while the smallest wire could transmit the charge without special impediment, it would go as fast and as far as in a wire of indefinitely large sectional area; but if the small wire were overcharged, or heated, to a degree diminishing "conductivity" while much increasing retardation, or what the French term "condensation," then a sensible difference would be discovered immediately. A man may walk along a narrow way as fast and as far as along a wide road, while he is not jostled, impeded or inconveniently squeezed. When lightning—the electric current from Nature's battery in the atmosphere—strikes the spindle of a HARRIS conductor fixed in a lofty mast, it is always carried down to the sea, not only without damaging any thing, (unless, perhaps, melting a few inches of the small spindle point,) but without displacing a particle of covering paint, or leaving a trace of its progress. Could this be so if the mysterious agent did not traverse the solid—and more readily—with less heat, and therefore without fusion, when finding ample metallic pathway?

To go further into this question—to show the fallacy of very prevalent ideas about "*circuits*," and to give a simple view of inductive action accordant with Prof. FARADAY's latest discoveries and investigations, would be misplaced here, however enticing. Indeed, it would be as futile as presumptuous to offer immature opinions, in addition to the few well-ascertained facts.

In the second chapter a lance is aimed at the proof armor of a most redoubtable champion of philosophy and science. To understand the controversy, more than the following extracts should be read, especially arguments urged in support of an idea that comparative density, saltness and evaporation (their chief cause) are the principal, if not the only originators of oceanic currents on a great scale. Commander MAURY says:

"With the view of ascertaining the average number of days during the year that the N. E. trade-winds of the Atlantic operate upon the currents between 25° N. and the equator, log-books containing no less than 380,284 observations on the force and direction of the wind in that ocean were examined. The data thus afforded were carefully compared and discussed. The results show that within those latitudes, and on the average, the wind from the N. E. quadrant is in excess of the winds from the S. W. only 111 days out of the 365. During the rest of the year the S. W. counteract the effect of the N. E. winds upon the currents. Now, can

the N. E. trades, by blowing for less than one-third of the time, cause the Gulf Stream to run all the time, and without varying its velocity either to their force or their prevalence? Sir JOHN HERSCHEL maintains that they can; that the trade-winds are the *sole cause* of the Gulf Stream; not, indeed, by causing 'a head of water' in the West Indian seas, but by rolling particles of water before them, somewhat as billiard balls are rolled over the table. He denies to evaporation, temperature, salts and sea-shells any effective influence whatever upon the circulation of the waters in the ocean. According to him, the winds are the supreme current-producing power in the sea. This theory would require all the currents of the sea to set with the winds, or, when deflected, to be deflected from the shore, as billiard balls are from the cushions of the table, making the littoral angles of incidence and reflection equal. Now, so far from this being the case, *not one* of the *constant* currents of the sea either makes such a rebound or sets with the winds. The Gulf Stream sets as it comes out of the Gulf of Mexico, and for hundreds of miles after it enters the Atlantic, against the trade-winds; for a part of the way it runs right in the 'wind's eye.' The Japan current, 'the Gulf Stream of the Pacific,' does the same. The Mozambique current runs to the south, against the S. E. trade-winds, and it changes not with the monsoons. The ice-bearing currents of the north oppose the winds in their course. HUMBOLDT's current has its genesis in the ex-tropical regions of the south, where the 'brave west winds' blow with almost, if not with quite the regularity of the trades, but with double their force. And this current, instead of setting to the S. E. before these winds, flows north in spite of them. These are the main and constant currents of the sea—the great arteries and jugulars through which its circulation is conducted. In every instance, and regardless of winds, those currents that are warm flow towards the poles, those that are cold set towards the equator. And this they do, not by the force of the winds, but in spite of them, and by the force of those very agencies that make the winds to blow. They flow thus by virtue of those efforts which the sea is continually making to restore that equilibrium to its waters which heat and cold, the forces of evaporation and the secretion of its inhabitants, are everlastingly destroying. If the winds makes the *upper*, what makes the *under* and counter currents? This question is of itself enough to impeach that supremacy of the winds upon the currents, which the renowned philosopher, with whom I am so unfortunate as to differ, travelled so far out of his way to vindicate. The 'bottles' also dispute, in their silent way, the 'supremacy of the winds' over the currents of the sea. The bottles that are thrown overboard to try currents are partly out of the water. The wind *has* influence upon them; yet of all those—and they are many—that have been thrown overboard in the trade-wind region of the North Atlantic, or in the Caribbean Sea, where the trade-winds blow, none have been found to drift *with* the wind; they all drift with the current, and nearly at right angles to the wind. That the winds do make currents in the sea no one will have the hardihood to deny; but currents that are born of the winds are as unstable as the winds; uncertain as to time, place and direction, they are sporadic and ephemeral."

Perhaps too much has been made of the very small differences between the specific gravity of the ocean in various regions. Assuming 1,000 parts (say grains) as the weight of one volume of pure distilled water, the

average weight of an equal volume, by measure, of ocean water, is 1,027 of such parts. Rarely, indeed, has it been found, at or near the surface, to exceed 1,030; but it diminishes at the surface first, after heavy rains, or within the influence of fresh-water rivers, (such as the Amazon, Orinoco, Mississippi, Congo, Ganges, Indus, Hoang-Ho, &c.) and, in general, on soundings *near land*. It is very difficult to read the scale of a hydrometer accurately, when a ship has motion, and if very great care be not taken, an oily finger, or the adhesion of dust on so delicate a test instrument, may make a difference (as the late Mr. WELSH proved) of more than two divisions or parts of the scale, between 1,000 and 1,040.*

The chapters on climate and commerce, on the atmosphere, and on rains and rivers, are full to repletion of valuable remarks, the results of collecting in all directions before sifting and condensing. We could wish that more frequent reference had been made to authorities whose ideas, if not words, strike the mind in reading these well-filled pages. We have a reverential attachment to the works of early navigators, such as DAMPIER, COOK, LA PEROUSE and FLINDERS, and have been accustomed to prize the experience, inaccessible to many, we admit, of other seamen in this century. In quoting instances of excessive fall of rain, our excellent author has been misinformed on two material points, and has, of course, proportionally weakened the force of arguments based on those supposed facts. Speaking of the rain fall in Patagonia, he mentions nearly 150 inches in a year, quoting KING and FITZROY. On referring to "The Voyages of the Adventure and Beagle," we can find no such statement. No record of rain-fall was made by the Beagle's officers—only one by those of the Adventure, which was for two months only in Chiloe. The much lamented FOSTER, when in the Chanticleer, near Cape Horn, had a rain-gauge in St. Martin's Cove for rather more than a month of particularly bad weather, in the rainest season. Between Western and Eastern Patagonia we presume there must be great differences of climate in the same latitude, owing to the lofty Andes on the west, and prevalent westerly winds which blow over or round their snowy summits. The other instance, which it seems necessary to notice, is the presumed fall of about 600 inches of rain in a year in India. Examination of Col. SYKES' statements has shown, that during heavy rain, of a very rainy season, about 300 inches of rain fell. But the rest of the year was dry in that country. Prof. OLDHAM's facts, however, support Commander MAURY's statement of 600 inches in one year.

At the opening of his chapter on red fogs and sea breezes we read :

"The inhabitants of the sea-shore in tropical countries wait every morning with impatience the coming of the sea breeze. It usually sets in about ten o'clock. Then the sultry heat of the oppressive morning is dissipated, and there is a delightful freshness in the air, which seems to give new life to all for their daily labors. About sunset there is again another calm. The sea breeze is now done, and in a short time the land breeze sets in. This alternation of the land and sea breeze—a wind from the sea by day and from the land by night—is so regular in inter-tropical

* To avoid recurrence to this point, it may here be observed that, in pages 316 and 322, the percentages stated by the author, as bases of his argument, are those of the *differences* between the specific gravities; not those of the respective whole numbers themselves. The addition of a figure has given an undue importance to the matter.

countries, that they are looked for by the people with as much confidence as the rising and setting of the sun. In extra-tropical countries, especially those on the polar side of the trade winds, this phenomenon is presented only in summer and fall, when the heat of the sun is sufficiently intense to produce the requisite degree of atmospherical rarefaction over the land. This depends in a measure, also, upon the character of the land upon which the sea breeze blows, for when the surface is arid and the soil barren, the heating power of the sun is exerted with most effect. In such cases the sea breeze amounts to a gale of wind. In the summer of the southern hemisphere the sea breeze is more powerfully developed at Valparaiso than at any other place to which my services afloat have led me. Here regularly in the afternoon, at this season, the sea breeze blows furiously; pebbles are torn up from the walks and whirled about the streets; people seek shelter; the Almendral is deserted, business interrupted, and all communication from the shipping to the shore is cut off. Suddenly the winds and the sea, as if they had again heard the voice of rebuke, are hushed, and there is a great calm. The lull that follows is delightful. The sky is without a cloud; the atmosphere is transparency itself; the Andes seem to draw near; the climate, always mild and soft, becomes now doubly sweet by the contrast. The evening invites abroad, and the population sally forth—the ladies, in ball costume, for now there is not wind enough to disarrange the lightest curl. In the southern summer this change takes place day after day with the utmost regularity, and yet the calm always seems to surprise, and to come before one has time to realize that the furious sea wind could so soon be hushed. Presently the stars begin to peep out, timidly at first, as if to see whether the elements here below had ceased their strife, and if the scene on earth be such as they, from their bright spheres aloft, may shed their sweet influences upon. Sirius, or that blazing world *n* Argus, may be the first watcher to send down a feeble ray; then follow another and another, all smiling meekly; but presently, in the short twilight of the latitude, the bright leaders of the starry host blaze forth in all their glory, and the sky is decked and spangled with superb brilliants. In the twinkling of an eye, and faster than the admiring gazer can tell, the stars seem to leap out from their hiding place. By invisible hands, and in quick succession, the constellations are hung out; but first of all, and with dazzling glory, in the azure depths of space, appears the great Southern Cross. That shining symbol lends a holy grandeur to the scene, making it still more impressive. Alone in the night-watch, after the sea breeze has sunk to rest, I have stood on the deck under those beautiful skies, gazing, admiring, rapt. I have seen there, above the horizon at once, and shining with a splendor unknown to these latitudes, every star of the first magnitude—save only six—that is contained in the catalogue of the 100 principal fixed stars of astronomers. There lies the city on the sea-shore, wrapped in sleep. The sky looks solid, like a vault of steel set with diamonds. The stillness below is in harmony with the silence above, and one almost fears to speak, lest the harsh sound of the human voice, reverberating through those 'vaulted chambers of the south,' should wake up echo, and drown the music that fills the soul. On looking aloft, the first emotion gives birth to a homeward thought: bright and lovely as they are, those, to northern sons, are not the stars nor the skies of fatherland. Alpha Lyrae, with his pure white light, has gone from the zenith, and only

appears for one short hour above the top of the northern hills. Polaris and the Great Bear have ceased to watch from their posts; they are away down below the horizon. But, glancing the eye above and around, you are dazzled with the splendors of the firmament. The moon and the planets stand out from it; they do not seem to touch the blue vault in which the stars are set. The Southern Cross is just about to culminate. Climbing up in the east are the Centaurs, Spica, Boötes and Antares, with his lovely little companion, which only the best telescopes have power to unveil. These are all bright particular stars, differing from one another in color as they do in glory. At the same time the western sky is glorious with its brilliants, too. Orion is there, just about to march down into the sea; but Canopus and Sirius, with Castor and his twin brother, and Procyon, and Argus and Regulus—these are high up in their course; they look down with great splendor, smiling peacefully as they precede the Southern Cross on its western way. And yonder, farther still, away to the south, float the Magellanic clouds, and the 'Coal Sacks'—those mysterious, dark spots in the sky, which seem as though it had been rent, and these were holes in the 'azure robe of night,' looking out in the starless, empty, black abyss beyond. One who has never watched the southern sky in the stillness of the night, after the sea breeze, with its turmoil, is done, can have no idea of its grandeur, beauty and loveliness. Within the tropics, however, the land and sea breezes are more gentle, and, though the night scenes there are not so suggestive as those just described, yet they are exceedingly delightful and altogether lovely. The oppressive heat of the sun and the climate of the sea-shore is mitigated and made both refreshing and healthful by the alternation of those winds which invariably come from the coolest place—the sea, which is the cooler by day, and the land, which is the cooler by night. About ten in the morning the heat of the sun has played upon the land with sufficient intensity to raise its temperature above that of the water. A portion of this heat being imparted to the superincumbent air, causes it to rise, when the air, first from the beach, then from the sea, to the distance of several miles, begins to flow in with a most delightful and invigorating freshness."

EHRENBERG's examination of the "sea-dust," which occasionally falls so thickly near the Cape Verde Islands, has induced a supposition that the trade-winds carry this dust *across* the inter-tropical zone, these winds ascending there and *crossing*. But this, as a general principle, is untenable; because one current of air, equal in volume and impetus to another opposing it, cannot pass on; it must turn or diverge. Dust carried up into the higher atmosphere is liable to be drifted hither and thither, regularly or irregularly, according to the current of air in which it may be suspended. Its course and ultimate place of deposit must be uncertain, like the progress of bottles in an ocean, which sometimes show a special line of drift, but more frequently are carried about variously by successive currents.

That the microscope can prove such infusoria to be South American, not African, and that the upper *returning* current, or the upper *onward* current of air from Brazil crosses the equatorial zone, and moves towards the northeast, are postulates hardly to be granted. Red fogs are well known to be frequent during the "Harmattan" of Western Africa—a dry, off-shore wind. The dust then obscuring sight is certainly African.

Within a thousand miles or so of a volcanic eruption dust occasionally falls from that source, and is carried in various directions many hundreds of miles, by co-existing, superposed, but totally different strata or currents of the atmosphere.

In treating of the trade-winds, HADLEY must not be eclipsed by even the celebrated HALLEY. To HADLEY, the inventor of our first reflecting instrument for use at sea, we also owe the first theory of the trade-winds, which has stood the test of time, and is now, one may say, endorsed by HERSCHEL and DOVE, in whose last admirable work (translated into English) HADLEY has his legitimate place.

In addition to great *general* causes or principles—partial consequences of evaporation and condensation, of effects occasioned by intervening continents, or even islands, and of rapid changes resulting from electrical action—demand attention; without attributing all these peculiarities to one *supposed* origin—namely, “magnetism”—itself only a concomitant phenomenon, Commander MAURY’s assertion, that the poles of the wind, of greatest cold and of magnetism, are so nearly coincident as to be within a few degrees of each other, in either hemisphere, is very striking.

In connection with the *Polynian* question, with the recorded Dutch voyages, in the seventeenth century, into open water, near the pole—with WEDDELL’S Antarctic high latitude in unfrozen ocean—the migration of reindeer from South Greenland towards the *north* as winter approaches, and the constant currents transporting large icebergs from polar regions, into which, therefore, other currents must flow, underneath or through other openings—in connection with these, (among many curious facts connected with Polar temperatures,) and the apparent vicinity of the magnetic, the cold and the wind poles, with their comparative distance or separation from the true poles of the earth’s axis, an extreme degree of interest must be felt generally.

Respecting the currents, the specific gravity and the salts of the sea, our author should be followed through his chapters, which are themselves summaries; scarcely free, however, from occasional repetitions. Prof. HUBBARD’S elaborate series of experiments at Washington Observatory, in 1858, seem to prove that although “fresh water attains its maximum density at 39° 5’ Fahrenheit, average sea water does not arrive at its maximum density until it passes its freezing point (27° 2’) and reaches the temperature of 25° 6’.” After describing how he made an appearance of “snowing upwards” in a glass vessel of water, the scientific experimenter says: “In some instances the water was brought down, in a confined vessel, to 18° before freezing; but as soon as freezing commenced, the thermometer mounted up to 28°. MELLONI has shown that the power of salt water to transmit heat is very much greater than that of fresh. The freezing point of strong brine is 4°; consequently, the freezing point of water in the sea may vary, according to the proportion of salts in it, from 4° all the way up to just below 32°.” May we not ask whether ready access of air, or the contrary, does not affect congelation?

Commander MAURY says that the surface-waters of the Red Sea “have been found as high in temperature as 95° Fahrenheit—a sea at blood heat!” Authentic evidence is on record of an occasional sea-surface temperature of 92° at the Philippine Islands, the Galapagos, on the coast of Mexico, and elsewhere; but generally between the tropics oceanic temperature

averages nearly the same as air immediately over it; namely, between 70° and 80° .

Very remarkable instances occur, in several parts of the world, of contiguous currents of the ocean, differing from ten to twenty degrees in temperature, considerably also in density and saltness, conspicuously, too, in color. From many barometrical observations, our author has inferred that the mercurial column stands considerably lower in Arctic and Antarctic regions than it does in inter-tropical latitudes, on an average, throughout the year. But this inference has been drawn from accumulated and collated observations of one season, not throughout the year—in summer and autumn only—not in winter and spring also! The barometer ranges as high in those regions as anywhere.

Sir L. M'CLINTOCK lately registered thirty-one inches. Canadian and Russian observations equal this height; and many Antarctic records show numerous instances of high barometer. But there is a fact which, unexplained duly, may have led to this fallacy. In the great Southern Ocean, between 40° and 60° south, there is no interruption to wind, in the zone of westerly winds, except the projection of South America, ending in Cape Horn. Hence a less impeded "anti-trade," a more regular flow, as it were, of the great combination of polar and tropical currents by the west, without the resistances so frequently caused by mountainous or other extensive territorial impediments in the northern hemisphere. Consequently, the vertical atmospherical pressure is comparatively less, on an average; and, as the prevailing wind is westerly, inclining from the tropical side of west, the barometer is (on account of the *direction* and moisture) usually lower than it averages elsewhere. But this is in summer and autumn. During the southern winter and spring, easterly storms or gales of wind, as well as intervals of fine settled weather, are frequent, with the barometer as high and as steady during the *fine* easterly weather as in any part of the world. Hence we decline to infer, that because in the parallel of 50° south the barometer average is low, it must be lower still in 70° south, evidence indicating that a contrary conclusion is safer.

Speculations about the effects of polar condensation of vapor and liberation of latent heat, are very curious, and would be intensely interesting, had we only sufficient *facts* on which to base them, did we even know whether there is a *polynia* in the Arctic, and another such sea, or an archipelago, or a continent, in the Antarctic regions.

In noticing fogs, icebergs and clouds, a variety of very striking remarks is offered. Among the number are observations obtained from Commodore WULLERSTORF, commanding the Austrian frigate *Novara*, only recently returned from a scientific expedition around the world, and some of the results of Prof. PIAZZI SMYTH's astronomical excursion to Teneriffe.

Currency has been given by our author to an expression, not so superior to its equivalent in good English as to justify such frequent use of it. Instead of "variables," we find "doldrums," a rather objectionable corruption of the words "in dolorem," meaning in grief or trouble. Like "fli-buster," it is scarcely a word for general use.

In exploring the great depths of ocean much had been achieved by America before our *later* expeditions were organized; but much had been long contemplated and earnestly desired by the late Sir FRANCIS BEAUFORT, who, in 1853, was planning a voyage, in which deep-sounding

LOSS OF LIFE AT SEA.

RECORD OF LIVES LOST AT SEA AND AT WRECKS, REPORTED DURING MARCH, 1861.

* The First Column refers to the Date of the New York Paper containing the Report

DATE OF REPORT.	NO. OF PERSONS	NAMES, ETC.	BY WHAT VESSEL.	MASTER.	LOCATION OF LOSS.	DATE OF LOSS.	WHERE FROM.	WHERE BOUND.
1	11	Men, Woman, {	Dark Tonquin,	Bachelor,	Off Wicklow Head,	February 9,	Glasgow,	Santa.
2	1	Crew of	Ship Macconomo,	Geo. B. Swasey,	Missing since	November 26,	New York,	London.
3	15	E. Gunderson,	Ship Fenelon,	Holkins,	Lost overboard,	February 16,	Leghorn,	New York.
4	1	John Byard,	Brig Macassar, (Br.)	Whipple,	Missing since	November 8,	London,	Boston.
5	9	James Lewis,	Brig John Wesley,	Smith,	Lost over, Lat. 39° 20', Lon. 71° 34',	November 30,	New York,	Liverpool.
6	1	James Welsh,	Brig Missionary, (Br.)	Neal,	Lost over, Lat. 29° 34', Lon. 40° 38',	January 1,	Sunderland,	New York.
7	1	Men,	Ship Columbia,	Bryant,	Lost overboard,	February 1,	Liverpool,	New York.
8	1	Henry Granger,	Ship Ceres,	Hampbrey,	(No particulars.)	.....	Fleetwood,	New York.
9	1	John R. Sommer,	Brig Regina, (Br.)	Skilton,	Lost over, Lat. 34°, Lon. 71°,	February 14,	Falmouth,	New York.
10	1	Isaac Holt,	Ship West Point,	Child,	Lost overboard,	March 10,	Liverpool,	New York.
11	1	Joseph Bond,	Ship Pearl,	Lank,	Lost over, Lat. 41° 6', Lon. 66° 54',	March 10,	Baltimore,	Savannah.
12	1	John Gordon,	Schr. Truro, (Br.)	Cartlin,	Lost overboard,	March 10,	Hallux,	New York.
13	1	Crew of	Ship Samuel O. Grant,	Hinchley,	Lost overboard,	February 11,	Liverpool,	New York.
14	3	Crew of	Schr. Blasco,	Colbeth,	Wrecked near Scutuate,	March 16,	Machias,	Boston.
15	9	Crew of	Schr. Susan Young,	Anth. Medora,	Missing since	February 6,	Gloucester,	Fishing.
16	8	Crew of	Schr. H. N. Stanwood,	Pat. Gorman,	Missing since	February 6,	Gloucester,	Fishing.
17	9	Crew of	Schr. White Sealow,	Peter Nelson,	Missing since	February 6,	Gloucester,	Fishing.
18	9	Crew of	Dark Harvest Queen,	Wheeler,	Wrecked near Scutuate,	March 14,	Buenos Ayres,	Boston.
19	6	William Ogden,	Ship London,	Hurbutt,	Lost overboard,	March 4,	London,	New York.
20	1	Capt. Miliken,	Schr. Sarah Jane,	Milliken,	Wrecked on Isle of Shoals,	March 14,	Rockland,	Boston.
21	1	Seaman,	Schr. Sarah Jane,	Milliken,	Wrecked near GJara, Cuba,	March 16,	Rockland,	Boston.
22	1	Capt. Walter H. Hines,	Schr. Cactus,	N. M. Russell,	Wrecked near Scutuate,	March 21,	Brazo,	New York.
23	1	Crew of	Schr. Belle Brandon,	Geoklin,	Lost overboard of Machius Island,	March 21,	New York,	Calais.
24	3	Crew of	Schr. Susan Baker,	Small,	Wrecked near Scutuate,	March 22,	Elizabethport,	Saco.
25	4	Crew of	Schr. A. B. Thompson,	Healy,	Lost from boat near Antwerp,	March 22,	Off Antwerp,	.....
26	1	Seaman,	Ship Danube,	Slaples,	Lost from boat near Antwerp,	March 22,	New Orleans,	Liverpool.
27	1	Edward Martin,	Schr. Wm. Mason,	Hilton,	Lost by collision and sinking of schr.,	March 22,	Gloucester,	Baltimore.
28	1	Joseph King,	Dark Queen of the Fleet, (Br.)	Cole,	Lost overboard,	March 12,	Attakapas,	New York.
29	1	Capt. J. S. Leighton,	Brig Glenageog,	Slaples,	Lost overboard,	March 15,	Centnegosa,	Boston.
30	1	Brig Farrar, (Br.)	Ship Sir J. Franklin,	J. S. Leighton,	Lost over, Lat. 40° Lon. 69,	March 22,	Calders,	Boston.
31	1	Henry Pearson,	Ship Sir J. Franklin,	Despauz,	Lost over, Lat. 38° 33', Lon. 81,	February 28,	Liverpool,	Baltimore.
32	1	George Kimo,	Ship Devonshire,	Anderson,	Lost over, Lat. 44° 30', Lon. 21° 34,	February 28,	Liverpool,	Baltimore.
33	1	Mahomet Mende,	Ship Francis B. Cutting,	Maloney,	Lost overboard,	March 21,	London,	New York.
34	1	Jefferson Polce,	Ship Lammenger,	Codin,	Fell from aloft,	March 31,	Havre,	New York.
35	1					February 8,	Calao,	New York.

Those who are particularly interested in the changes of the world's climate during long periods may turn to chapter xv., with advantage, especially pages 353-4-5. In chapters xvi. to xviii. monsoons and sea climates are discussed in a very interesting manner, however one may feel at times inclined to draw conclusions adverse to those of the author.

The last four chapters, "On Storms, Hurricanes and Typhoons;" "On the Winds of the Southern Hemisphere;" "On the Antarctic Regions and their Climatology," and "On the Actinometry of the Sea," cannot now be further noticed, though full of valuable and interesting material.

In connection with our author's observations on storms and winds in general, one may advert to remarks on their subject in the *Athenæum* of November 17 and 24, 1860, in which Sir JOHN HERSCHEL's and Prof. DOVE's opinions were quoted.

We close this admirable work with an earnest recommendation of it to readers in general, as well as to the scientific, and to the maritime interests especially.—*Athenæum*.

THE COMMERCE OF NORTHERN ITALY.

FROM THE CORRESPONDENT OF THE LONDON TIMES, JANUARY 22.

TILL such time as railway communication may establish, together with the political and administrative unity, also the utmost possible industrial and commercial intercourse by land, the prosperity of this country must necessarily depend chiefly on its maritime resources. The Italians reckon the length of their sea-coasts at 5,894 kilomètres; but in the 3,326 kilomètres which make up the continental line they include Istria and Illyria, and in the 2,568 which they attribute to their islands, they comprehend Corsica and Malta, all of which may only be said to belong to Italy by way of geographical courtesy. The latest returns of the merchant trade of the whole country date from the years 1856-7, since which, as I have had frequent occasion to observe, all statistical operations have, by political vicissitudes, been brought to a standstill. On the 31st of December, 1855, the whole of Italy had 27,320 vessels, with a tonnage of 889,037. In the two following years the vessels were 26,793, of 938,624 tons. The tonnage, which in 1855 was computed in the ratio of 151 tons per kilomètre, rose to 160 tons per kilomètre. The proportions between the shipping and tonnage in the different Italian States give results analogous to those we have observed in the general trade of the country. In old Piedmont the vessels were 2,098, with 208,218 tons. In the Two Sicilies the vessels were 11,032, of 272,305 tons. Venetia and Illyria had 9,704 vessels, of 319,122 tons.

In Genoa alone, from 1845 to 1856, the business of the harbor rose from 372,653 tons to 581,721 tons. In 1851 ships were built in Genoa with a tonnage of 12,346. In 1856 of 22,500 tons. The tendency of the trade led to the construction of vessels of large tonnage, so that on the 31st of December, 1851, Genoa had 1,042 vessels, of 129,504 tons; on the 31st of December, 1856, Genoa had 1,102 vessels, of 163,362 tons; on the 31st of December, 1857, Genoa had 1,102 vessels, of 172,576 tons. The average tonnage in 1852 was only 64 tons per vessel; in 1857 it was 75 tons per vessel.

The cotton imported into Genoa in 1847 was only 32,556 bales; it had risen to 62,970 bales in 1857. Of this 1,400,000 kilogrammes came direct from the cotton-growing countries; about as large a quantity was imported from England.

The same eagerness to build large ships for the ocean trade was discernible in Tuscany. In 1846 Leghorn had 773 vessels, of 24,147 tons; in 1855, 939 vessels, of 55,631 tons. The business transacted in that port in the first year was only 140 millions of francs; in 1855 it had risen to 242 millions. The commerce of Trieste is said to equal in extent that of the whole of old Piedmont—that is, that of Genoa; but, if deduction be made for what belongs to the interior of the Austrian empire, there will remain local business in Trieste to the amount of 514 millions in 1852, and 536 millions in 1857.

The trade of Venice was reckoned at 110 millions in 1853, and 211 millions in 1857. I am, for my own part, no great believer in vague and approximate numbers, and I believe hardly any fair estimate can be made of the general Italian trade such as it was previous to the great political events which are likely to combine the forces and resources of the country into one common effort; but I have before me the excellently arranged authentic statistics published by the Sardinian government, and shall quote a few facts which may give an idea of the importance of the trade of this part of the country. A multiplication of it by five will show us what the combined trade of the whole Peninsula ought to have been before 1859, and what it may actually become if the advantages enjoyed by Piedmont during the last 12 years can be secured to the newly-annexed territories for at least a period of 12 years to come.

The first country in the importance of its trade with Sardinia was France. Sardinia imported to the amount of 115 millions general trade and 77 millions special trade in 1857; 119 millions general trade and 88 millions special trade in 1858. The exports from Sardinia to France were—general trade, 105 millions in 1857, 138 millions in 1858; special trade, 90 millions in 1857, 122 millions in 1858.

Next to the French was the English trade. 63 millions in 1857, and 67 millions in 1858, for the general trade; 38 millions in 1857, and 35 millions in 1858, for special trade were the imports. The exports were 12 millions in 1857, and 6 millions in 1858, general trade; 8 millions in 1857, and 4 millions in 1858, special trade.

The countries which transacted the greatest amount of business with Sardinia, after France and England, were Switzerland, many cantons of which were dependent on Genoa for their maritime communications; then Austria, on account of her Lombardo-Venetian possessions; next came the Italian Duchies, Parma, Modena, Tuscany and Monaco; then the United States of America; after which came the Two Sicilies. Russia was the eighth State considered in the importance of its trade with Piedmont; the 9th was Holland; the 10th, Brazil; the 11th, the West Indies and Central America; 12th, Spain; 13th, South America; 14th, Turkey; 15th, the Papal States; 16th, Belgium; 17th, Tunis and Tripoli, and so on to Greece, which was the 28th State in importance, the last and least. These numbers only refer to the general trade; in special trade occasional differences occur.

To give an idea of the increase of trade in old Piedmont in seven years it will be sufficient to state that the general trade with France was,

in 1851, 150 millions commercial value. In 1858 it had risen to 258 millions. The general trade with England was 44 millions in 1851; it rose to 75 millions in 1858. The general trade of Sardinia with all the countries in the world, which was 469 millions in 1851, had reached 643 millions in 1857, and 880 millions in 1858.

There is, in short, no doubt but the commercial activity and maritime enterprise of the only part of Italy which was free for the last 12 years has been altogether doubled, and very nearly trebled in some of its most important branches. The increase in the dimensions and tonnage of the shipping of the different Italian ports, especially of Genoa and Leghorn, evinces a strong desire on the part of the people to extend their operations beyond the limits of the inland sea within which they had for many years been circumscribed. If we take the old State of Sardinia to represent only one-fifth of the whole Peninsula as to territory and population, it will be easy to calculate the degree of prosperity to which the united kingdom now obeying the sceptre of VICTOR EMANUEL will rise, if liberty lead to as glorious results in the new States as it wrought in the old provinces.

When I stated above that the trade of Sardinia with France is, or was till 1858, about twice the amount of the commerce of the same State with England, it should be understood that the difference is in some measure only apparent, as no small proportion of the goods exported from Italy to France finds its way from this latter country ultimately into England; and, again, large quantities of English manufactures imported into Italy through France go to swell the amount of Italian-French trade. The real wealth of this country, consisting in silk, corn, oil, rice, cattle and other agricultural produce, has been nearly trebled during the last ten or twelve years, and we have frequent instances that not only most of the other articles, but even the last named (cattle) has travelled all the way to England; and a Piedmontese agriculturalist informed me that beef fattened in his own native fields, near Chivasso, was by himself eaten in London when he visited that city at the time of the Great Exhibition of 1851.

IRON SHIPS vs. WOODEN SHIPS.

THE constant recurrence of fatal accidents to iron-built ships is beginning to awaken very serious doubts as to their seaworthiness. A report recently made by a committee of the New-York Chamber of Commerce, from the pen of a veteran captain, does not withhold its censures of the entire system, expressed in very decided terms. The engineers of Great Britain are becoming equally decided in opinion that, as now constructed, they are dangerous craft, and it is even doubtful whether the material itself is as much to be depended on as has been supposed. Six or seven have foundered within a short period, and, as in the instance of the Galway steamer *Connaught*, without the possibility of assigning the definite cause. It is beginning to be feared that the construction of iron ships must be abandoned, unless some new method of putting them together shall be adopted. This would be a serious blow to the steam marine of Great Britain, which has increased with wonderful rapidity since this new application of iron, and also to the enormous manufacturing interests

which are sustained by the practice. The scarcity of ship-timber naturally led to the adoption of this new material, and its supply is always dependent on the continuance of peace, and an uninterrupted navigation of the ocean. It is no wonder then, that the substitution of iron was hailed as the best means of retaining the naval supremacy which has so long been the boast, as it has been the policy, of British statesmen.

Although the construction of iron vessels in England and Scotland has been followed up by the French and Belgians with great spirit, their example has only been recently imitated in the United States; probably for two reasons, one, the abundance of ship-timber, the other the cost of iron and the labor of manufacturing it. Recently, however, we have commenced the system, and at Wilmington, Delaware, upwards of seventy hulls of iron have been put together. At Williamsburgh, Boston and Philadelphia there are also more or less constructed, and the cost is about the same as that of wooden ships coppered. Such, however, is the alarm occasioned by the losses referred to, that the underwriters in Europe and the United States have begun to consider the extra risks which they incur in issuing policies on iron vessels, and numerous experiments have recently been made to arrive at a proper solution of the real difficulties in the case, with a view to obviate them. From a careful examination of these experiments, as reported in some late English scientific journals, we learn the results thus far arrived at are considered to be quite unfavorable. It would appear from these, first, that a preliminary objection is found in the quality of the iron used, which has proved to be very inferior. Tests on this point were made in 1857 under the direction of LLOYDS, and resulted in showing, that the best plates exhibited on the trial would not bear a pressure of five tons per square inch of actual cross section, and the average was barely above ten tons. Subsequently the Board made it a requirement in their rules, that "all plate, beam and angle iron for ships intended for classification" should be stamped on both sides with the maker's name and address. In the course of further experiments by Mr. FAIRBAIRN, a well-known expert, and Mr. BERTRAM, at Woolwich, a singular yet prevalent opinion, that *thick plate is relatively weaker than thin*—a statement that bears alarmingly on the value of iron as a material for ship-building—was fully demonstrated to be true. Indeed, the result was startling. Although the LLOYDS' experiments were made on plates only $\frac{3}{8}$ inch thick, it is determined, in order to obtain a twelve years' regular classification of a 3,000 ton ship at their office, to use iron $1\frac{1}{4}$ inch thick in the garboard streaks, (those next the keel,) but it turns out that a riveted joint of even $\frac{1}{2}$ inch iron is absolutely weaker than one of $\frac{3}{8}$ inch plate. A single riveted seam of a certain width, of $\frac{3}{8}$ inch plate, required a strain of 18 tons to fracture it, while a seam precisely similar in $\frac{1}{2}$ inch iron was torn open at 16 tons. We might adduce other experiments with the same results, but the deduction is sufficient for our purpose, which is, that in a $\frac{3}{8}$ inch plate a single riveted joint possessed 60 per cent. of the full strength of the solid plate; one of $\frac{1}{4}$ inch iron had but 50 per cent., and one of $\frac{1}{2}$ inch plate but 40 per cent., the latter being but two-thirds as strong in proportion to its thickness, and actually weaker, irrespective of thinness itself, than a plate only one-fourth thinner. We can now understand what was meant by a very eminent iron-founder and engineer of this city, who not long ago remarked, that "few knew how singular and how uncertain is the conduct of iron in machinery."

Next: The riveting of iron ships is practically insecure. On the authority before us, from which we quote, we learn that, in frequent instances, a thousand headless rivets may be found in the bottom of an iron hull after only one or two voyages, and that a smart kick of the foot is often sufficient to shake out these decapitated rivets in numbers enough to open the seams and let in the sea. This is rather an alarming feature for the contemplation of a passenger in an iron steamer. We have held the opinion for some years, long before we ever saw the statement before us, that the plates of an iron ship, working and laboring under the effect of a heavy sea, or of the machinery on board, would cut off the heads of these iron rivets.

Again: The ordinary construction, a disproportionate length to breadth, gives rise to these results, and "a vertebral weakness," and a destructive leverage is continually at work on the weak part of the vessels. Their whole fabric may suddenly break up in a heavy gale. LLOYDS have within the year required additional longitudinal strengthening in iron steamers insured by them.

We learn that active efforts are being made by the British builders to overcome these difficulties, by additional stringers, thicker gunwales, cellular girders, (such as are on board the *Great Eastern*.) fore and aft bulkheads, as well as athwart ships, and as many of these last as twenty or thirty in any large vessel. It is evident that if there be but a few of these bulkheads or compartments in a ship, and one of them shall be staved and filled with water, the strain upon the other parts must be dangerously increased by the additional weight thrown upon them, and the change of the centres of motion and of gravity. It is true that steamers have been saved by this plan of compartments even on a small scale, but it is doubtful whether the other parts of the hull have in subsequent voyages retained their original strength and tightness.

Finally, with iron ships have arisen the uncertainty of compass steering, through the errors arising from local attraction and the difficulty of accurate corrections. The greatest amount of disturbance hitherto known in vessels built of wood, under the most unfavorable circumstances, has rarely exceeded two points, and even this is serious enough, but in iron vessels it may be so great as to render the compass next to useless. In the case of the steamer *Shanghai*, belonging to the Peninsular and Oriental Company, it was ascertained on one voyage, that while she was heading south, the deviation amounted to $171^{\circ} 34'$, or more than fifteen points. As every piece of iron in a ship may become magnetic by induction, and as the poles vary according to the ship's variation, and change altogether with the latitude north or south of the equator, innumerable expedients have been resorted to to obviate these errors and dangers. The most learned of modern British *savans* have given this subject their close attention for the purpose of furnishing a remedy; but as every iron ship is a magnet itself, and as the errors of one ship are different from those of another, it has been found in practice that the compasses of each vessel require corrections of their own; that a vessel, when being constructed, should be placed with particular reference to the magnetic meridian of the place of construction, and when afloat, the effect of local attraction should be determined by the method of swinging ship on the thirty-two points of the compass, and ascertaining the reverse bearings on the ship's deck and on shore.

It is, however, due to our subject to state that these difficulties, though not absolutely overcome, have been rendered less important by the splendid labors of such men as BARLOW, JOHNSON, SCORESBY, AIRY, STEBBING and others of that class, and also by the establishment of a Magnetic Observatory at Woolwich, where the compasses used in the government ships are examined, tested and perfected. A memorial recommending a similar establishment in this city has been for a year past before the Chamber of Commerce, awaiting a proper time for its due consideration.

There has been no greater triumph of mechanical skill in our day than in the adaptation of iron to the purposes of navigation. The largest ship that ever floated on the ocean is constructed of this material, and it was said of her in advance, that in consequence of her cellular construction, although her tonnage (builders' measure) is 22,500 tons, yet if she was merely supported by blocks of stone six feet square at her stem and stern, her deflection midships would not be greater than six inches with all her machinery, coal, cargo and crew on board. We believe, however, that the Great Eastern has not proved as stiff as was expected. It was ascertained, while she was lying in her dock in this harbor, that both her bow and stern had dropped below their original lines, their buoyancy being not proportioned to their weights. Her quality of strength, great as it is, has yet to be tested in future voyages.

It would be most unfortunate, after the great outlay of capital to perfect them, if iron ships should be found unsafe and perishable from causes peculiar to themselves. It remains for the ingenious and scientific to surmount these obstacles by some new arrangement, perhaps of the plates, welding them, rolling them out to a greater length, or placing them diagonally or at some angle with a small strain, or fastening them on a timber skeleton, or by transverse compartments at short distances, as has been proposed. At present, public confidence, we fear, is sadly shaken in its opinion of the seaworthiness of iron ships. It must, however, by no means be overlooked in the consideration of this subject, that, almost without exception, the losses at sea referred to have been those where the screw was the propelling power.

THE WOOL TRADE OF GREAT BRITAIN.

ANNUAL REPORT FOR 1860.

Messrs. R. W. RONALD & SON, of Liverpool.

In taking a retrospect of the past year, we are happy to say the wool trade, on the whole, has been in a very satisfactory and healthy state. In the early part political events abroad, and to some extent also at home, and, subsequently, serious apprehensions for the harvests, had a somewhat depressing influence, and induced all parties to act with great caution. This feeling has continued more or less throughout the whole twelve months, and greatly tended to impart to our trade that stability and soundness which so favorably distinguish it at present. The exports of woollen manufactures show again an increase, as compared with the previous year, amounting to upwards of £1,000,000 more than in 1859, hitherto the largest year. The consequence has been a steady and profitable employment of the manufacturing population in this branch, which has thus been enabled to become again good customers to the home

trade. The raw material, so far as regards the yield of last year's clip of home growth, has proved materially deficient, owing to the severe and protracted winter, and consequent mortality among sheep. This deficiency has, in some degree, been supplemented by an increase in the imports of colonial and foreign wools, which are unprecedentedly large, exceeding those of the previous year by about 58,000 bales, or 12,000,000 lbs. The exports of colonial and foreign wools have also been larger than in 1859, by about 600,000 lbs., whilst those of home-grown wools by no less than 2,500,000 lbs., owing, no doubt, to the alteration in the French tariff. The total imports of Australian show an increase of about 14,000 bales. The bulk has, as usual, been disposed of at public auction in London, at the following four series, viz :

	<i>Bales.</i>		<i>Bales.</i>
March 1 to March 20,.....	35,987	of which 23,209 were	Capes.
May 3 to June 1,.....	67,911	"	5,847 "
July 19 to August 30,.....	88,639	"	10,224 "
November 15 to December 7,.....	45,576	"	21,138 "
Together,.....	238,113	"	54,418 "

The condition of Australian has been about the same as in the preceding year. During the first three sales, prices taken on the average did not undergo any material change, but at the last series, an advance of fully 1d. per lb. having been established, present rates must be quoted that much higher than at this time last year. Cape wools show but trifling improvement in price, and the condition still leaves much to be desired. The imports amount to upwards of 19,000 bags more than in 1859. The imports of 3,180 bales from North America have been principally the growth of Canada, of long-stapled description, and very well adapted to compete with English wool. There has again been a great falling off in the imports from Buenos Ayres, but we have had a very good inquiry, and our markets are quite bare of stock. The imports of Peruvian sheep's wool show a considerable decrease on those in 1859. Alpaca has arrived in larger quantity than ever, the imports being 10,000 ballots in excess of 1859. The demand has been principally for the best qualities, and stocks have been light throughout the year, as importers have met the demand by making, from time to time, considerable sales "for arrival." East India shows a very material increase in the imports, which have almost exclusively been directed to this port, and have formed the chief attraction at our public sales during the year, of which we had four series, viz :

	<i>Bales.</i>
The first, from Jan. 24 to Feb. 3, with.....	14,347
The second, from April 18 to April 27, with.....	13,070
The third, from June 25 to July 4, with.....	10,557
The fourth, from Sept. 19 to Sept. 29, with.....	18,560
In all,.....	56,534

Prices have, on the average, been very well maintained, while the condition of these wools, generally speaking, has not shown any marked improvement. The supply of domestic wools, owing to the circumstances alluded to in our general remarks, has been considerably short of former years, and we may safely put the deficiency down as at least 15 per cent-

countries, that they are looked for by the people with as much confidence as the rising and setting of the sun. In extra-tropical countries, especially those on the polar side of the trade winds, this phenomenon is presented only in summer and fall, when the heat of the sun is sufficiently intense to produce the requisite degree of atmospherical rarefaction over the land. This depends in a measure, also, upon the character of the land upon which the sea breeze blows, for when the surface is arid and the soil barren, the heating power of the sun is exerted with most effect. In such cases the sea breeze amounts to a gale of wind. In the summer of the southern hemisphere the sea breeze is more powerfully developed at Valparaiso than at any other place to which my services afloat have led me. Here regularly in the afternoon, at this season, the sea breeze blows furiously; pebbles are torn up from the walks and whirled about the streets; people seek shelter; the Almendral is deserted, business interrupted, and all communication from the shipping to the shore is cut off. Suddenly the winds and the sea, as if they had again heard the voice of rebuke, are hushed, and there is a great calm. The lull that follows is delightful. The sky is without a cloud; the atmosphere is transparency itself; the Andes seem to draw near; the climate, always mild and soft, becomes now doubly sweet by the contrast. The evening invites abroad, and the population sally forth—the ladies, in ball costume, for now there is not wind enough to disarrange the lightest curl. In the southern summer this change takes place day after day with the utmost regularity, and yet the calm always seems to surprise, and to come before one has time to realize that the furious sea wind could so soon be hushed. Presently the stars begin to peep out, timidly at first, as if to see whether the elements here below had ceased their strife, and if the scene on earth be such as they, from their bright spheres aloft, may shed their sweet influences upon. Sirius, or that blazing world, Argus, may be the first watcher to send down a feeble ray; then follow another and another, all smiling meekly; but presently, in the short twilight of the latitude, the bright leaders of the starry host blaze forth in all their glory, and the sky is decked and spangled with superb brilliants. In the twinkling of an eye, and faster than the admiring gazer can tell, the stars seem to leap out from their hiding place. By invisible hands, and in quick succession, the constellations are hung out; but first of all, and with dazzling glory, in the azure depths of space, appears the great Southern Cross. That shining symbol lends a holy grandeur to the scene, making it still more impressive. Alone in the night-watch, after the sea breeze has sunk to rest, I have stood on the deck under those beautiful skies, gazing, admiring, rapt. I have seen there, above the horizon at once, and shining with a splendor unknown to these latitudes, every star of the first magnitude—save only six—that is contained in the catalogue of the 100 principal fixed stars of astronomers. There lies the city on the sea-shore, wrapped in sleep. The sky looks solid, like a vault of steel set with diamonds. The stillness below is in harmony with the silence above, and one almost fears to speak, lest the harsh sound of the human voice, reverberating through those 'vaulted chambers of the south,' should wake up echo, and drown the music that fills the soul. On looking aloft, the first emotion gives birth to a homeward thought: bright and lovely as they are, those, to northern sons, are not the stars nor the skies of fatherland. Alpha Lyrae, with his pure white light, has gone from the zenith, and only

appears for one short hour above the top of the northern hills. Polaris and the Great Bear have ceased to watch from their posts; they are away down below the horizon. But, glancing the eye above and around, you are dazzled with the splendors of the firmament. The moon and the planets stand out from it; they do not seem to touch the blue vault in which the stars are set. The Southern Cross is just about to culminate. Climbing up in the east are the Centaurs, Spica, Boötes and Antares, with his lovely little companion, which only the best telescopes have power to unveil. These are all bright particular stars, differing from one another in color as they do in glory. At the same time the western sky is glorious with its brilliants, too. Orion is there, just about to march down into the sea; but Canopus and Sirius, with Castor and his twin brother, and Procyon, γ Argus and Regulus—these are high up in their course; they look down with great splendor, smiling peacefully as they precede the Southern Cross on its western way. And yonder, farther still, away to the south, float the Magellanic clouds, and the ‘Coal Sacks’—those mysterious, dark spots in the sky, which seem as though it had been rent, and these were holes in the ‘azure robe of night,’ looking out in the starless, empty, black abyss beyond. One who has never watched the southern sky in the stillness of the night, after the sea breeze, with its turmoil, is done, can have no idea of its grandeur, beauty and loveliness. Within the tropics, however, the land and sea breezes are more gentle, and, though the night scenes there are not so suggestive as those just described, yet they are exceedingly delightful and altogether lovely. The oppressive heat of the sun and the climate of the sea-shore is mitigated and made both refreshing and healthful by the alternation of those winds which invariably come from the coolest place—the sea, which is the cooler by day, and the land, which is the cooler by night. About ten in the morning the heat of the sun has played upon the land with sufficient intensity to raise its temperature above that of the water. A portion of this heat being imparted to the superincumbent air, causes it to rise, when the air, first from the beach, then from the sea, to the distance of several miles, begins to flow in with a most delightful and invigorating freshness.”

EHRENBERG’s examination of the “sea-dust,” which occasionally falls so thickly near the Cape Verde Islands, has induced a supposition that the trade-winds carry this dust *across* the inter-tropical zone, these winds ascending there and *crossing*. But this, as a general principle, is untenable; because one current of air, equal in volume and impetus to another opposing it, cannot pass on; it must turn or diverge. Dust carried up into the higher atmosphere is liable to be drifted hither and thither, regularly or irregularly, according to the current of air in which it may be suspended. Its course and ultimate place of deposit must be uncertain, like the progress of bottles in an ocean, which sometimes show a special line of drift, but more frequently are carried about variously by successive currents.

That the microscope can prove such infusoria to be South American, not African, and that the upper *returning* current, or the upper *onward* current of air from Brazil crosses the equatorial zone, and moves towards the northeast, are postulates hardly to be granted. Red fogs are well known to be frequent during the “Harmattan” of Western Africa—a dry, off-shore wind. The dust then obscuring sight is certainly African.

Within a thousand miles or so of a volcanic eruption dust occasionally falls from that source, and is carried in various directions many hundreds of miles, by co-existing, superposed, but totally different strata or currents of the atmosphere.

In treating of the trade-winds, HADLEY must not be eclipsed by even the celebrated HALLEY. To HADLEY, the inventor of our first reflecting instrument for use at sea, we also owe the first theory of the trade-winds, which has stood the test of time, and is now, one may say, endorsed by HERSCHEL and DOVE, in whose last admirable work (translated into English) HADLEY has his legitimate place.

In addition to great *general* causes or principles—partial consequences of evaporation and condensation, of effects occasioned by intervening continents, or even islands, and of rapid changes resulting from electrical action—demand attention; without attributing all these peculiarities to one *supposed* origin—namely, “magnetism”—itself only a concomitant phenomenon, Commander MAURY’s assertion, that the poles of the wind, of greatest cold and of magnetism, are so nearly coincident as to be within a few degrees of each other, in either hemisphere, is very striking.

In connection with the *Polynian* question, with the recorded Dutch voyages, in the seventeenth century, into open water, near the pole—with WEDDELL’S Antarctic high latitude in unfrozen ocean—the migration of reindeer from South Greenland towards the *north* as winter approaches, and the constant currents transporting large icebergs from polar regions, into which, therefore, other currents must flow, underneath or through other openings—in connection with these, (among many curious facts connected with Polar temperatures,) and the apparent vicinity of the magnetic, the cold and the wind poles, with their comparative distance or separation from the true poles of the earth’s axis, an extreme degree of interest must be felt generally.

Respecting the currents, the specific gravity and the salts of the sea, our author should be followed through his chapters, which are themselves summaries; scarcely free, however, from occasional repetitions. Prof. HUBBARD’S elaborate series of experiments at Washington Observatory, in 1858, seem to prove that although “fresh water attains its maximum density at 39° 5’ Fahrenheit, average sea water does not arrive at its maximum density until it passes its freezing point (27° 2’) and reaches the temperature of 25° 6’.” After describing how he made an appearance of “snowing upwards” in a glass vessel of water, the scientific experimenter says: “In some instances the water was brought down, in a confined vessel, to 18° before freezing; but as soon as freezing commenced, the thermometer mounted up to 28°. MELLONI has shown that the power of salt water to transmit heat is very much greater than that of fresh. The freezing point of strong brine is 4°; consequently, the freezing point of water in the sea may vary, according to the proportion of salts in it, from 4° all the way up to just below 32°.” May we not ask whether ready access of air, or the contrary, does not affect congelation?

Commander MAURY says that the surface-waters of the Red Sea “have been found as high in temperature as 95° Fahrenheit—a sea at blood heat!” Authentic evidence is on record of an occasional sea-surface temperature of 92° at the Philippine Islands, the Galapagos, on the coast of Mexico, and elsewhere; but generally between the tropics oceanic temperature

averages nearly the same as air immediately over it; namely, between 70° and 80°.

Very remarkable instances occur, in several parts of the world, of contiguous currents of the ocean, differing from ten to twenty degrees in temperature, considerably also in density and saltness, conspicuously, too, in color. From many barometrical observations, our author has inferred that the mercurial column stands considerably lower in Arctic and Antarctic regions than it does in inter-tropical latitudes, on an average, throughout the year. But this inference has been drawn from accumulated and collated observations of one season, not throughout the year—in summer and autumn only—not in winter and spring also! The barometer ranges as high in those regions as anywhere.

Sir L. M'CLINTOCK lately registered thirty-one inches. Canadian and Russian observations equal this height; and many Antarctic records show numerous instances of high barometer. But there is a fact which, unexplained duly, may have led to this fallacy. In the great Southern Ocean, between 40° and 60° south, there is no interruption to wind, in the zone of westerly winds, except the projection of South America, ending in Cape Horn. Hence a less impeded "anti-trade," a more regular flow, as it were, of the great combination of polar and tropical currents by the west, without the resistances so frequently caused by mountainous or other extensive territorial impediments in the northern hemisphere. Consequently, the vertical atmospherical pressure is comparatively less, on an average; and, as the prevailing wind is westerly, inclining from the tropical side of west, the barometer is (on account of the *direction* and moisture) usually lower than it averages elsewhere. But this is in summer and autumn. During the southern winter and spring, easterly storms or gales of wind, as well as intervals of fine settled weather, are frequent, with the barometer as high and as steady during the *fine* easterly weather as in any part of the world. Hence we decline to infer, that because in the parallel of 50° south the barometer average is low, it must be lower still in 70° south, evidence indicating that a contrary conclusion is safer.

Speculations about the effects of polar condensation of vapor and liberation of latent heat, are very curious, and would be intensely interesting, had we only sufficient *facts* on which to base them, did we even know whether there is a *polynia* in the Arctic, and another such sea, or an archipelago, or a continent, in the Antarctic regions.

In noticing fogs, icebergs and clouds, a variety of very striking remarks is offered. Among the number are observations obtained from Commodore WULLERSTORF, commanding the Austrian frigate *Novara*, only recently returned from a scientific expedition around the world, and some of the results of Prof. PLAZZI SMYTH's astronomical excursion to Teneriffe.

Currency has been given by our author to an expression, not so superior to its equivalent in good English as to justify such frequent use of it. Instead of "variables," we find "doldrums," a rather objectionable corruption of the words "in dolorem," meaning in grief or trouble. Like "filibuster," it is scarcely a word for general use.

In exploring the great depths of ocean much had been achieved by America before our *later* expeditions were organized; but much had been long contemplated and earnestly desired by the late Sir FRANCIS BEAUFORT, who, in 1853, was planning a voyage, in which deep-sounding

apparatus, similar to that used lately by Sir LEOPOLD M'CINTOCK, was to have been used; but the Russian war interfered. Several voyagers used contrivances for obtaining material from the bottom of the ocean; but neither the "deep-sea clamms," nor any other instrument, has answered in practice better than a rather modified one, on what is called BROOKES' plan. Our author says:

"The honor of the first attempt to recover specimens of the bottom from great depths belong to Peter the Great of Russia. That remarkable man and illustrious monarch constructed a deep-sea sounding apparatus especially for the Caspian Sea. It was somewhat in the shape of a pair of ice-hooks, and such as are seen in the hands of the 'ice-man,' as, in his daily rounds, he lifts the blocks of ice from his cart in the street for delivery at the door. It was so contrived that, when it touched the bottom, the plummet would become detached, and the hook would bring up the specimen."

Unquestionably submarine exploration is now become one of the most important nautical employments of the time. Hesitating and slowly we advance. Mistakes and accidents, mismanagement and want of knowledge have impeded progress; but triumphant eventually will be its grand consequences.

Describing the condition of infusoria at the bottom of vast depths of ocean, Commander MAURY says:

"Having thus discovered that the most frail and delicate organisms of the sea can remain in its depths for an indefinite length of time without showing a single trace of decay, we find ourselves possessed of a fact which suggests many beautiful fancies, some touching thoughts, and a few useful ideas; and among these last are found reasons for the conjecture that the gutta percha or other insulating material in which the conducting wires of the sub-Atlantic telegraph and other deep-sea lines are incased, becomes, when lodged beyond a certain depth, impervious to the powers of decay; that, with the weight of the sea upon them, the destructive agents which are so busy upon organic matter in the air and near the surface cannot find room for play. Curious that destruction and decay should be imprisoned and rendered inoperative at the bottom of the great deep! * * The unabraded appearance of these shells, and the almost total absence among them of any detritus from the sea or foreign matter, suggest most forcibly the idea of perfect repose at the bottom of the deep sea. Some of the specimens are as pure and as free from the sand of the sea as the freshly-fallen snow-flake is from the dust of the earth. Indeed, these soundings suggest the idea that the sea, like the snow cloud with its flakes in a calm, is always letting fall upon its bed showers of these microscopic shells; and we may readily imagine that the 'sunless wrecks' which strew its bottom are, in the process of ages, hid under this fleecy covering, presenting the rounded appearance which is seen over the body of the traveller who has perished in the snow storm. The ocean, especially within and near the tropics, swarms with life. The remains of its myriads of moving things are conveyed by currents, and scattered and lodged in the course of time all over its bottom. This process, continued for ages, has covered the depths of the ocean as with a mantle, consisting of organisms as delicate as the maced frost, and as light in the water as is down in the air."

Those who are particularly interested in the changes of the world's climate during long periods may turn to chapter xv., with advantage, especially pages 353-4-5. In chapters xvi. to xviii. monsoons and sea climates are discussed in a very interesting manner, however one may feel at times inclined to draw conclusions adverse to those of the author.

The last four chapters, "On Storms, Hurricanes and Typhoons," "On the Winds of the Southern Hemisphere," "On the Antarctic Regions and their Climatology," and "On the Actinometry of the Sea," cannot now be further noticed, though full of valuable and interesting material.

In connection with our author's observations on storms and winds in general, one may advert to remarks on their subject in the *Athenæum* of November 17 and 24, 1860, in which Sir JOHN HERSCHEL's and Prof. DOVE's opinions were quoted.

We close this admirable work with an earnest recommendation of it to readers in general, as well as to the scientific, and to the maritime interests especially.—*Athenæum*.

THE COMMERCE OF NORTHERN ITALY.

FROM THE CORRESPONDENT OF THE LONDON TIMES, JANUARY 22.

TILL such time as railway communication may establish, together with the political and administrative unity, also the utmost possible industrial and commercial intercourse by land, the prosperity of this country must necessarily depend chiefly on its maritime resources. The Italians reckon the length of their sea-coasts at 5,894 kilometres; but in the 3,326 kilometres which make up the continental line they include Istria and Illyria, and in the 2,568 which they attribute to their islands, they comprehend Corsica and Malta, all of which may only be said to belong to Italy by way of geographical courtesy. The latest returns of the merchant trade of the whole country date from the years 1856-7, since which, as I have had frequent occasion to observe, all statistical operations have, by political vicissitudes, been brought to a standstill. On the 31st of December, 1855, the whole of Italy had 27,320 vessels, with a tonnage of 889,037. In the two following years the vessels were 26,793, of 938,624 tons. The tonnage, which in 1855 was computed in the ratio of 151 tons per kilometre, rose to 160 tons per kilometre. The proportions between the shipping and tonnage in the different Italian States give results analogous to those we have observed in the general trade of the country. In old Piedmont the vessels were 2,098, with 208,218 tons. In the Two Sicilies the vessels were 11,032, of 272,305 tons. Venetia and Illyria had 9,704 vessels, of 319,122 tons.

In Genoa alone, from 1845 to 1856, the business of the harbor rose from 372,653 tons to 581,721 tons. In 1851 ships were built in Genoa with a tonnage of 12,346. In 1856 of 22,500 tons. The tendency of the trade led to the construction of vessels of large tonnage, so that on the 31st of December, 1851, Genoa had 1,042 vessels, of 129,504 tons; on the 31st of December, 1856, Genoa had 1,102 vessels, of 163,362 tons; on the 31st of December, 1857, Genoa had 1,102 vessels, of 172,576 tons. The average tonnage in 1852 was only 64 tons per vessel; in 1857 it was 75 tons per vessel.

The cotton imported into Genoa in 1847 was only 32,556 bales; it had risen to 62,970 bales in 1857. Of this 1,400,000 kilogrammes came direct from the cotton-growing countries; about as large a quantity was imported from England.

The same eagerness to build large ships for the ocean trade was discernible in Tuscany. In 1846 Leghorn had 773 vessels, of 24,147 tons; in 1855, 939 vessels, of 55,631 tons. The business transacted in that port in the first year was only 140 millions of francs; in 1855 it had risen to 242 millions. The commerce of Trieste is said to equal in extent that of the whole of old Piedmont—that is, that of Genoa; but, if deduction be made for what belongs to the interior of the Austrian empire, there will remain local business in Trieste to the amount of 514 millions in 1852, and 536 millions in 1857.

The trade of Venice was reckoned at 110 millions in 1853, and 211 millions in 1857. I am, for my own part, no great believer in vague and approximate numbers, and I believe hardly any fair estimate can be made of the general Italian trade such as it was previous to the great political events which are likely to combine the forces and resources of the country into one common effort; but I have before me the excellently arranged authentic statistics published by the Sardinian government, and shall quote a few facts which may give an idea of the importance of the trade of this part of the country. A multiplication of it by five will show us what the combined trade of the whole Peninsula ought to have been before 1859, and what it may actually become if the advantages enjoyed by Piedmont during the last 12 years can be secured to the newly-annexed territories for at least a period of 12 years to come.

The first country in the importance of its trade with Sardinia was France. Sardinia imported to the amount of 115 millions general trade and 77 millions special trade in 1857; 119 millions general trade and 88 millions special trade in 1858. The exports from Sardinia to France were—general trade, 105 millions in 1857, 138 millions in 1858; special trade, 90 millions in 1857, 122 millions in 1858.

Next to the French was the English trade. 63 millions in 1857, and 67 millions in 1858, for the general trade; 38 millions in 1857, and 35 millions in 1858, for special trade were the imports. The exports were 12 millions in 1857, and 6 millions in 1858, general trade; 8 millions in 1857, and 4 millions in 1858, special trade.

The countries which transacted the greatest amount of business with Sardinia, after France and England, were Switzerland, many cantons of which were dependent on Genoa for their maritime communications; then Austria, on account of her Lombardo-Venetian possessions; next came the Italian Duchies, Parma, Modena, Tuscany and Monaco; then the United States of America; after which came the Two Sicilies. Russia was the eighth State considered in the importance of its trade with Piedmont; the 9th was Holland; the 10th, Brazil; the 11th, the West Indies and Central America; 12th, Spain; 13th, South America; 14th, Turkey; 15th, the Papal States; 16th, Belgium; 17th, Tunis and Tripoli, and so on to Greece, which was the 28th State in importance, the last and least. These numbers only refer to the general trade; in special trade occasional differences occur.

To give an idea of the increase of trade in old Piedmont in seven years it will be sufficient to state that the general trade with France was,

in 1851, 150 millions commercial value. In 1858 it had risen to 258 millions. The general trade with England was 44 millions in 1851; it rose to 75 millions in 1858. The general trade of Sardinia with all the countries in the world, which was 469 millions in 1851, had reached 643 millions in 1857, and 880 millions in 1858.

There is, in short, no doubt but the commercial activity and maritime enterprise of the only part of Italy which was free for the last 12 years has been altogether doubled, and very nearly trebled in some of its most important branches. The increase in the dimensions and tonnage of the shipping of the different Italian ports, especially of Genoa and Leghorn, evinces a strong desire on the part of the people to extend their operations beyond the limits of the inland sea within which they had for many years been circumscribed. If we take the old State of Sardinia to represent only one-fifth of the whole Peninsula as to territory and population, it will be easy to calculate the degree of prosperity to which the united kingdom now obeying the sceptre of VICTOR EMANUEL will rise, if liberty lead to as glorious results in the new States as it wrought in the old provinces.

When I stated above that the trade of Sardinia with France is, or was till 1858, about twice the amount of the commerce of the same State with England, it should be understood that the difference is in some measure only apparent, as no small proportion of the goods exported from Italy to France finds its way from this latter country ultimately into England; and, again, large quantities of English manufactures imported into Italy through France go to swell the amount of Italian-French trade. The real wealth of this country, consisting in silk, corn, oil, rice, cattle and other agricultural produce, has been nearly trebled during the last ten or twelve years, and we have frequent instances that not only most of the other articles, but even the last named (cattle) has travelled all the way to England; and a Piedmontese agriculturalist informed me that beef fattened in his own native fields, near Chivasso, was by himself eaten in London when he visited that city at the time of the Great Exhibition of 1851.

IRON SHIPS vs. WOODEN SHIPS.

THE constant recurrence of fatal accidents to iron-built ships is beginning to awaken very serious doubts as to their seaworthiness. A report recently made by a committee of the New-York Chamber of Commerce, from the pen of a veteran captain, does not withhold its censures of the entire system, expressed in very decided terms. The engineers of Great Britain are becoming equally decided in opinion that, as now constructed, they are dangerous craft, and it is even doubtful whether the material itself is as much to be depended on as has been supposed. Six or seven have foundered within a short period, and, as in the instance of the Galway steamer *Connaught*, without the possibility of assigning the definite cause. It is beginning to be feared that the construction of iron ships must be abandoned, unless some new method of putting them together shall be adopted. This would be a serious blow to the steam marine of Great Britain, which has increased with wonderful rapidity since this new application of iron, and also to the enormous manufacturing interests

which are sustained by the practice. The scarcity of ship-timber naturally led to the adoption of this new material, and its supply is always dependent on the continuance of peace, and an uninterrupted navigation of the ocean. It is no wonder then, that the substitution of iron was hailed as the best means of retaining the naval supremacy which has so long been the boast, as it has been the policy, of British statesmen.

Although the construction of iron vessels in England and Scotland has been followed up by the French and Belgians with great spirit, their example has only been recently imitated in the United States; probably for two reasons, one, the abundance of ship-timber, the other the cost of iron and the labor of manufacturing it. Recently, however, we have commenced the system, and at Wilmington, Delaware, upwards of seventy hulls of iron have been put together. At Williamsburgh, Boston and Philadelphia there are also more or less constructed, and the cost is about the same as that of wooden ships coppered. Such, however, is the alarm occasioned by the losses referred to, that the underwriters in Europe and the United States have begun to consider the extra risks which they incur in issuing policies on iron vessels, and numerous experiments have recently been made to arrive at a proper solution of the real difficulties in the case, with a view to obviate them. From a careful examination of these experiments, as reported in some late English scientific journals, we learn the results thus far arrived at are considered to be quite unfavorable. It would appear from these, first, that a preliminary objection is found in the quality of the iron used, which has proved to be very inferior. Tests on this point were made in 1857 under the direction of LLOYDS, and resulted in showing, that the best plates exhibited on the trial would not bear a pressure of five tons per square inch of actual cross section, and the average was barely above ten tons. Subsequently the Board made it a requirement in their rules, that "all plate, beam and angle iron for ships intended for classification" should be stamped on both sides with the maker's name and address. In the course of further experiments by Mr. FAIRBAIRN, a well-known expert, and Mr. BERTRAM, at Woolwich, a singular yet prevalent opinion, that *thick plate is relatively weaker than thin*—a statement that bears alarmingly on the value of iron as a material for ship-building—was fully demonstrated to be true. Indeed, the result was startling. Although the LLOYDS' experiments were made on plates only $\frac{3}{8}$ inch thick, it is determined, in order to obtain a twelve years' regular classification of a 3,000 ton ship at their office, to use iron $1\frac{1}{4}$ inch thick in the garboard streaks, (those next the keel,) but it turns out that a riveted joint of even $\frac{1}{2}$ inch iron is absolutely weaker than one of $\frac{3}{8}$ inch plate. A single riveted seam of a certain width, of $\frac{3}{8}$ inch plate, required a strain of 18 tons to fracture it, while a seam precisely similar in $\frac{1}{2}$ inch iron was torn open at 16 tons. We might adduce other experiments with the same results, but the deduction is sufficient for our purpose, which is, that in a $\frac{3}{8}$ inch plate a single riveted joint possessed 60 per cent. of the full strength of the solid plate; one of $\frac{1}{2}$ inch iron had but 50 per cent., and one of $\frac{1}{4}$ inch plate but 40 per cent., the latter being but two-thirds as strong in proportion to its thickness, and actually weaker, irrespective of thinness itself, than a plate only one-fourth thinner. We can now understand what was meant by a very eminent iron-founder and engineer of this city, who not long ago remarked, that "few knew how singular and how uncertain is the conduct of iron in machinery."

Next : The riveting of iron ships is practically insecure. On the authority before us, from which we quote, we learn that, in frequent instances, a thousand headless rivets may be found in the bottom of an iron hull after only one or two voyages, and that a smart kick of the foot is often sufficient to shake out these decapitated rivets in numbers enough to open the seams and let in the sea. This is rather an alarming feature for the contemplation of a passenger in an iron steamer. We have held the opinion for some years, long before we ever saw the statement before us, that the plates of an iron ship, working and laboring under the effect of a heavy sea, or of the machinery on board, would cut off the heads of these iron rivets.

Again : The ordinary construction, a disproportionate length to breadth, gives rise to these results, and "a vertebral weakness," and a destructive leverage is continually at work on the weak part of the vessels. Their whole fabric may suddenly break up in a heavy gale. LLOYDS have within the year required additional longitudinal strengthening in iron steamers insured by them.

We learn that active efforts are being made by the British builders to overcome these difficulties, by additional stringers, thicker gunwales, cellular girders, (such as are on board the *Great Eastern*,) fore and aft bulkheads, as well as athwart ships, and as many of these last as twenty or thirty in any large vessel. It is evident that if there be but a few of these bulkheads or compartments in a ship, and one of them shall be staved and filled with water, the strain upon the other parts must be dangerously increased by the additional weight thrown upon them, and the change of the centres of motion and of gravity. It is true that steamers have been saved by this plan of compartments even on a small scale, but it is doubtful whether the other parts of the hull have in subsequent voyages retained their original strength and tightness.

Finally, with iron ships have arisen the uncertainty of compass steering, through the errors arising from local attraction and the difficulty of accurate corrections. The greatest amount of disturbance hitherto known in vessels built of wood, under the most unfavorable circumstances, has rarely exceeded two points, and even this is serious enough, but in iron vessels it may be so great as to render the compass next to useless. In the case of the steamer *Shanghai*, belonging to the Peninsular and Oriental Company, it was ascertained on one voyage, that while she was heading south, the deviation amounted to $171^{\circ} 34'$, or more than fifteen points. As every piece of iron in a ship may become magnetic by induction, and as the poles vary according to the ship's variation, and change altogether with the latitude north or south of the equator, innumerable expedients have been resorted to to obviate these errors and dangers. The most learned of modern British *savans* have given this subject their close attention for the purpose of furnishing a remedy ; but as every iron ship is a magnet itself, and as the errors of one ship are different from those of another, it has been found in practice that the compasses of each vessel require corrections of their own ; that a vessel, when being constructed, should be placed with particular reference to the magnetic meridian of the place of construction, and when afloat, the effect of local attraction should be determined by the method of swinging ship on the thirty-two points of the compass, and ascertaining the reverse bearings on the ship's deck and on shore.

It is, however, due to our subject to state that these difficulties, though not absolutely overcome, have been rendered less important by the splendid labors of such men as BARLOW, JOHNSON, SCORESBY, AIRY, STEBBING and others of that class, and also by the establishment of a Magnetic Observatory at Woolwich, where the compasses used in the government ships are examined, tested and perfected. A memorial recommending a similar establishment in this city has been for a year past before the Chamber of Commerce, awaiting a proper time for its due consideration.

There has been no greater triumph of mechanical skill in our day than in the adaptation of iron to the purposes of navigation. The largest ship that ever floated on the ocean is constructed of this material, and it was said of her in advance, that in consequence of her cellular construction, although her tonnage (builders' measure) is 22,500 tons, yet if she was merely supported by blocks of stone six feet square at her stem and stern, her deflection midships would not be greater than six inches with all her machinery, coal, cargo and crew on board. We believe, however, that the Great Eastern has not proved as stiff as was expected. It was ascertained, while she was lying in her dock in this harbor, that both her bow and stern had dropped below their original lines, their buoyancy being not proportioned to their weights. Her quality of strength, great as it is, has yet to be tested in future voyages.

It would be most unfortunate, after the great outlay of capital to perfect them, if iron ships should be found unsafe and perishable from causes peculiar to themselves. It remains for the ingenious and scientific to surmount these obstacles by some new arrangement, perhaps of the plates, welding them, rolling them out to a greater length, or placing them diagonally or at some angle with a small strain, or fastening them on a timber skeleton, or by transverse compartments at short distances, as has been proposed. At present, public confidence, we fear, is sadly shaken in its opinion of the seaworthiness of iron ships. It must, however, by no means be overlooked in the consideration of this subject, that, almost without exception, the losses at sea referred to have been those where the screw was the propelling power.

THE WOOL TRADE OF GREAT BRITAIN.

ANNUAL REPORT FOR 1860.

Messrs. R. W. RONALD & SON, of Liverpool.

IN taking a retrospect of the past year, we are happy to say the wool trade, on the whole, has been in a very satisfactory and healthy state. In the early part political events abroad, and to some extent also at home, and, subsequently, serious apprehensions for the harvests, had a somewhat depressing influence, and induced all parties to act with great caution. This feeling has continued more or less throughout the whole twelve months, and greatly tended to impart to our trade that stability and soundness which so favorably distinguish it at present. The exports of woollen manufactures show again an increase, as compared with the previous year, amounting to upwards of £1,000,000 more than in 1859, hitherto the largest year. The consequence has been a steady and profitable employment of the manufacturing population in this branch, which has thus been enabled to become again good customers to the home

trade. The raw material, so far as regards the yield of last year's clip of home growth, has proved materially deficient, owing to the severe and protracted winter, and consequent mortality among sheep. This deficiency has, in some degree, been supplemented by an increase in the imports of colonial and foreign wools, which are unprecedentedly large, exceeding those of the previous year by about 58,000 bales, or 12,000,000 lbs. The exports of colonial and foreign wools have also been larger than in 1859, by about 600,000 lbs., whilst those of home-grown wools by no less than 2,500,000 lbs., owing, no doubt, to the alteration in the French tariff. The total imports of Australian show an increase of about 14,000 bales. The bulk has, as usual, been disposed of at public auction in London, at the following four series, viz :

	<i>Bales.</i>		<i>Bales.</i>
March 1 to March 20,.....	35,987	of which 23,209 were Capes.	
May 8 to June 1,.....	67,911	"	5,847
July 19 to August 30,.....	88,639	"	10,224
November 15 to December 7,.....	45,576	"	21,138
Together,.....	238,118	"	54,418

The condition of Australian has been about the same as in the preceding year. During the first three sales, prices taken on the average did not undergo any material change, but at the last series, an advance of fully 1d. per lb. having been established, present rates must be quoted that much higher than at this time last year. Cape wools show but trifling improvement in price, and the condition still leaves much to be desired. The imports amount to upwards of 19,000 bags more than in 1859. The imports of 3,180 bales from North America have been principally the growth of Canada, of long-stapled description, and very well adapted to compete with English wool. There has again been a great falling off in the imports from Buenos Ayres, but we have had a very good inquiry, and our markets are quite bare of stock. The imports of Peruvian sheep's wool show a considerable decrease on those in 1859. Alpaca has arrived in larger quantity than ever, the imports being 10,000 ballots in excess of 1859. The demand has been principally for the best qualities, and stocks have been light throughout the year, as importers have met the demand by making, from time to time, considerable sales "for arrival." East India shows a very material increase in the imports, which have almost exclusively been directed to this port, and have formed the chief attraction at our public sales during the year, of which we had four series, viz :

	<i>Bales.</i>
The first, from Jan. 24 to Feb. 3, with.....	14,347
The second, from April 18 to April 27, with.....	13,070
The third, from June 25 to July 4, with.....	10,557
The fourth, from Sept. 19 to Sept. 29, with.....	18,560
In all,.....	56,534

Prices have, on the average, been very well maintained, while the condition of these wools, generally speaking, has not shown any marked improvement. The supply of domestic wools, owing to the circumstances alluded to in our general remarks, has been considerably short of former years, and we may safely put the deficiency down as at least 15 per cent-

when compared with 1859. The position of our market seems at present to be this. There is an increase in the imports of wool, according to the official trade returns, of 10 per cent., from which must be deducted an increase in the exports of wool of 9 per cent., thus leaving a net surplus of only 1 per cent. Against this, however, there appears an increase in the exports of manufactured woollen goods and yarns of 8 per cent., which, added to the deficiency in the home-growth of 15 per cent., leaves the supply of wool 22 per cent. short of that of 1859.

THE TIMBER TRADE OF GREAT BRITAIN.

ANNUAL REPORT.

From F. K. BARNES & SONS' Monthly Timber Circular.

CANONS' MARSH, *Bristol, Feb. 1, 1861.*

THE retrospect of the timber trade in the port of Bristol since the 1st February, 1860, is gratifying; for throughout the season there has been but little check, and prices have steadily advanced. When the first intimation was given that an equalization of the duties on wood was proposed by Mr. GLADSTONE, (the effect of which would be to bring the rate on foreign wood to a par with that from our own colonies,) some slight mistrust was experienced, and prices gave way nearly to the extent of the reduction made; but owing to the healthy state of our market, and the light stock on hand, prices gradually improved; and since the new duty came into operation, we have had monthly to report a steady advance. The reduction has thus had a similar effect to what it had on former occasions; and instead of acting prejudicially to our colonial sellers, they have, owing to an increasing demand and the prosperity of our country, obtained fully as high prices as they did before the alteration. We believe that they will continue to so, for the wood from Canada is of a description which is essential for many purposes, and cannot be obtained from the Baltic, and the spruce of New-Brunswick comes forward at lower prices than any large quantity of Baltic wood, notwithstanding the difference in freight. We shall, therefore, always have to rely on North America for the bulk of our requirements in the cheap descriptions of timber and the soft pine of that country.

The prospects for the ensuing year we can scarcely foresee. If, during the next two or three months, there is a brisk demand, the stock here is so moderate that it will be consumed, and, in that case, importation will be active; but if, on the contrary, we have a severe winter and a late spring, coupled with pressure on the money market, or any other circumstance that acts against the prosperity of our country, the stock in this port will carry us well into the summer, and but a light trade will be done by our importers at the opening of the season. Our opinion is, that the spring trade will be steady, without any extraordinary excitement or depression, and that the early operations will, therefore, be of a moderate character.

This port, we are pleased to advise, has well maintained its position as

an important timber market; and although at one time we feared a large falling off in the amount of our tonnage employed, compared with that of the year 1859, (which falling off was, on the 1st of October, 14,848 tons, and on the 1st December, 15,667 tons short, as compared with the corresponding months in 1859, it is, we are gratified to state, but 6,945 tons short at the present time. This proves how well Bristol has maintained her position as a rising timber market.

The rates of freight are as difficult to foretell this year as the prospects of our importing trade, and will depend very much on our home spring trade. The past, if not a very profitable year to our ship-owners, has at least been a paying one, and subject to no violent depression. Indeed, the autumn rates were high. We are of opinion that spring charters to this channel will be done at 33s. from Quebec, or thereabouts. New-Brunswick freights, at present high, will recede as the spring opens, when American and Norwegian vessels offer. We may anticipate low rates from the deal ports of North America; for, owing to the secession movement in that country, we apprehend that the ship-owners of the northern States will prefer employing their vessels in deal carrying, to risking them with their southern neighbors. Baltic freights bid fair to open high, and we expect that 18s. from Danzig to Memel, 60s. @ 70s. per Petersburg standard hundred from gulf ports, and 90s. from the White Sea, will be about the rates. From Cronstadt we can scarcely hope to have the low return freight of American vessels; and if not, freights to this coast are too high to enable the importer to operate on this market profitably.

Importation, Consumption and Stock for the years 1858, 1859 and 1860.

	<i>Importation.</i>		
	1858.	1859.	1860.
Colonial timber,.....	1,292,000	1,066,500	1,415,000
Colonial deals,.....	1,893,000	2,703,700	1,640,000
Total in cubic feet,.....	3,185,000	3,770,200	3,055,000
Foreign timber,.....	419,500	719,300	908,000
Foreign deals,.....	812,500	1,281,900	1,417,500
Total in cubic feet,.....	1,232,000	2,001,200	2,325,500
Aggregate total,.....	4,417,000	5,771,400	5,380,500
	<i>Consumption.</i>		
	1858.	1859.	1860.
Colonial timber,.....	1,075,000	1,071,500	1,400,000
Colonial deals,.....	2,463,500	2,260,450	1,658,150
Total in cubic feet,.....	3,538,500	3,331,950	3,058,150
Foreign timber,.....	668,500	475,800	937,500
Foreign deals,.....	916,000	983,850	1,307,950
Total in cubic feet,.....	1,584,500	1,459,650	2,245,450
Aggregate total,.....	5,123,000	4,791,600	5,303,600

	Stock.		
	1858.	1859.	1860.
Colonial timber.....	329,000	324,000	339,000
Colonial deals.....	324,000	767,250	749,100
Total in cubic feet,.....	653,000	1,091,250	1,088,100
Foreign timber.....	101,500	345,000	315,500
Foreign deals.....	408,000	701,250	810,800
Total in cubic feet,.....	504,500	1,046,250	1,126,300
Aggregate total,.....	1,157,500	2,137,500	2,214,400

Colonial Timber.—*Quebec Pine.*—The importation has been 1,150,000 feet, the consumption, 1,090,500, the stock remaining on hand, 333,500, which appears, on the first glance, much greater than it was last year; but on comparing the total stock of colonial timber, the surplus is but trifling; and on looking further there is a considerable diminution in Baltic fir; but as colonial timber is largely used for building purposes in the place of Baltic, we do not consider that we have more than enough on hand for the requirements of our trade before the new importation, although at the same time it must be remembered that our principal consumers are well supplied, and that their stock is not taken into account in our tables. Prices have been steady throughout the year, with little variation—building timber ranging from 1s. 2d. to 1s. 3d., and 60 feet average pine from 1s. 4d. to 1s. 6d. Board timber is not appreciated at a remunerative cost to the importers. Some good Waney board pine has been brought here, but owing to the loss in measure (as all timber is sold by calliper measure) it has not commanded the ready sale it does in other markets. *Saint John Pine.*—The importation was only 47,500 feet; consumption, 80,000; stock on hand, 2,500. No really good timber having been brought to our market all the year, the prices obtained have not exceeded those of common Quebec pine. Small quantities of large-sized fair quality timber would command paying prices if brought forward at moderate rates of freight. *Lower Port Pine.*—The stock, importation and consumption are very trifling, and this timber is not a favorite in our market.

Oak.—Importation, 75,000 feet; consumption, 84,500; stock, 3,000. It will thus be seen that the increase on import and consumption is very large, and we are left with but a small stock of 3,000 feet. Owing to the large supply, prices at one time were as low as 1s. 10d. per foot; but, owing to a good demand, they rapidly advanced to 2s. 3d. It is now worth from 2s. 3d. to 3s. The demand was caused by the great requirements of railway companies for truck building; and if, as is anticipated, a wagon-building company is established in Bristol, there will for the future be a large consumption of this timber here.

Elm.—Importation, 13,000 feet; consumption, 13,450; stock, 7,800. We have not a great demand for this article, as there is little ship-building in the port.

Birch.—Importation from all ports is 47,000 feet; consumption, 20,800; stock, 33,200; (this includes ash, walnut, &c.) The stock on hand is nearly double what it was last year; prices, however, have been fairly maintained, Quebec being steady at about 1s. 8d., St. John and Pictou, from 1s. 4d. to 1s. 8d., Prince Edward's Island, 1s. 3d. to 1s. 8d. It

may be noticed that the importation is less than in 1859 by 25,600 feet, and the stock is only 9,200 in excess.

Spruce and Pine Deals.—Importation, 6,666 Petersburg standard hundred; consumption, 7,666; stock, 3,000; showing, by our tables, a decrease in import of nearly 7,000 standard hundred; of consumption, 4,000 standard hundred; of stock held over, 1,000 standard hundred. But it must be remembered, that since the 1st of November last, the importation has been 3,200 standard hundred, which is an excess on the stock now held of 200 standard hundred. During the year there was a great scarcity of these goods, and prices, which were dull at from £8 to £8 10s. last spring, steadily advanced to from £10 to £10 10s., at which figure they are now steady. We would, however, caution importers not to import at high freights, for the stock is ample for our requirements during the next four months, during and after which time, lower freights may be expected, and future shipments of deals coming forward at present high rates must entail a heavy loss. Our market is capable of receiving a much larger supply than was brought here last year; but that supply should be regular, and not all forced on the market at one time, unless at exceedingly low freights.

Quebec Deals.—Importation, 3,300 standard hundred; consumption, 2,410 standard; stock, 1,540 standard. Notwithstanding the increase in supply over the previous year of nearly 1,000 standard hundred, these goods have maintained a steady position, and prices have been remunerative. There has been a decided improvement in the brack of these deals at Quebec, but there is still room for more. Larger quantities of extra lengths (13 and 14 feet) have also come forward, and are duly appreciated. We recommend cutters to increase the manufacture of these lengths. Prices have been firm at from £16 3s. to £17 for first quality; £11 10s. to £12 10s. for second, and £10 10s. for third.

Quebec Staves.—Importation of pipe staves, 76 St. Mill; consumption, 36, and stock, 63, (the stock being augmented by several parcels coming coastways.) Of West India puncheon staves the importation has been 125 Mille; consumption, 113 Mille; stock, 70 Mille. Throughout the year demand has been dull, and sales cannot be forced except at a great sacrifice. Unless there is a great improvement in demand, the stock is ample of both kinds for the present year. Prices of pipe staves have ranged from £55 to £72 10s., and of West India puncheon from £16 to £17 10s.

Lath-wood.—The importation has scarcely been equal to the demand, and prices have been good throughout. We may expect large quantities this year for stowage, in lieu of staves.

Cargoes of Wood imported into Bristol during the last seven years.

<i>Years ending the season of</i>	<i>Vessels.</i>	<i>Tons Register.</i>
1854,.....	145	69,616
1855,.....	99	44,775
1856,.....	148	73,841
1857,.....	151	73,486
1858,.....	144	68,863
1859,.....	193	91,007
1860,.....	167	84,062

WHOLESALE PRICE CURRENT.

<i>Articles from Quebec.</i>	<i>Prices.</i>	<i>Imported from Feb. 1st to Jan. 1st, 1860.</i>	<i>Imported from Feb. 1st to Jan. 1st, 1861.</i>
Yellow pine, per foot, cube,.....	1s. 8d. to 1s. 8d. }	15,171	19,882
Red pine, "	1 7 to 1 9 }		
Oak, "	2 8 to 2 9 }	384	917
Elm, "	1 8 to 2 0 }		
Ash, "	1 9 to 2 0 }	684	535
Birch, "	1 9 to 2 0 }		
Walnut, none.		795	1,777
<i>Yellow Pine Deals.</i>			
First quality, per 120, Pet'g standard, £16 10s. to £17 10s. }		144,485	199,491
Second " " " 12 10 to 13 0 }			
Third " None. 10 0 to 10 0 }			
<i>Spruce Deals.</i>			
First quality, None.			
Second quality, None.			
Std. staves, per mille,.....	66 0 to 65 0 }	61,538	76,361
First quality, "			
Brack, None.			
Do. W. O. Pun., per 1,200,.....	18 0 to 20 0 }	178,013	153,358
First quality, "			
Brack, "			
Lath-wood, per fathom of 144 feet, ..	5 15 to 6 10	229	380
Hickory billets, per doz.,.....	1 16 to 0 0		

THE FRENCH COMMERCIAL TREATY WITH GREAT BRITAIN.

THE Liverpool Chamber of Commerce recently passed votes of thanks to Mr. COBDEN and Mr. MALET, for their management of the details of the treaty of commerce with France. From Mr. COBDEN the following letter has been received :

ALGIERS, 20th March, 1861.

SIR,—I beg to acknowledge the receipt of the resolution of the Chamber of Commerce of Liverpool, bearing your signature as president, thanking me for my exertions in arranging the commercial treaty with France. I observe, with satisfaction, the judicious reserve with which the Chamber abstains from committing itself to our approval of the general principle of commercial treaties. The arrangement lately entered into with the French government is not, in its old and extensive sense, a commercial treaty, but a simultaneous movement on the part of the two countries in the direction of general freedom of trade. Nor should the changes made in the French tariff be judged merely by the standard of abstract principle, but with a fair consideration for the opposition which the government had to encounter, in its first serious measure of commercial reform, from an unbroken phalanx of monopolists, whose power can be more fully appreciated after the late demonstrations of the conservative party in the French Chambers. The great feature of the recent commercial arrangements, to my humble apprehension, is their tendency to limit the power of governments to disturb the amicable relations of the two countries, by making their friendship depend, not on dynastic sympathies, or the alliance with any particular ministry, but, to borrow the sentiment of Prince NAPOLEON, on the union of France with the great English people.

I remain, sir, your obedient servant,

RICHARD COBDEN.

W. J. TOMLINSON, Esq., *Chamber of Commerce, Liverpool.*

JOURNAL OF MERCANTILE LAW.

PARTNERS AND AGENTS.

Liability as Partner.—The case of *FITCH and others vs. HARRINGTON and others*, reported in 16 *Gray's Reports*, (Mass.) 468, illustrates how easily and without intending it, one can become a member of a firm so as to be liable for its debts.

WHITTEMORE, HARRINGTON & Co. was a firm doing business till 1857, when they stopped payment. While they were so engaged in business, LEONARD HARRINGTON, one of the members of the firm, made an arrangement with SAMUEL P. HARRINGTON, by which the share of LEONARD HARRINGTON was to be, and was thereafter owned by SAMUEL and LEONARD jointly. This arrangement was unknown to the other members of the firm, as well as to outsiders. After the failure of the firm, a creditor having learned of this arrangement, brought his action, making SAMUEL P. HARRINGTON one of the defendants, alleging he was a partner by virtue of the above-mentioned arrangement, and liable for the firm's debts. In submitting the case to the jury, the plaintiff requested the court to instruct the jury "that although SAMUEL P. HARRINGTON was not known by the members of the firm to be a partner, yet if the share in the partnership concern which stood in the name of LEONARD only, was owned jointly by LEONARD and SAMUEL, and SAMUEL, as between him and LEONARD, was entitled to the profits which might be derived from that share, he (SAMUEL) was a partner in the firm as to the plaintiffs, and liable to them in this action."

The court declined so to instruct the jury, and the plaintiffs excepted to the decision of the court, and appealed. On the appeal, the appellate court reversed the judgment, and granted a new trial. In making this disposition of the matter, the court said, among other things:

"Now what is our law and the law of England on this subject? We understand it to be thus: An agreement between one copartner and a third person, that he shall participate in the profits of the firm, renders him liable as a partner to the creditors of the firm, although as between himself and the members of the firm he is not their copartner."

Agent—Usury.—We are glad to find one case in which the court has declined to make the principal liable for the acts of his agent, and in which also it has declared that every statement of facts does not make out the defence of usury; and yet even in this case three of the members of the court dissented!!! We refer to the matter of *CONDIT vs. BALDWIN*, 21 *New-York Reps.* 219. This was an action on a promissory note. Defence—usury, of course.

The facts of the case were these: The plaintiff placed in the hands of S. R. WILLIAMS, an attorney and counsellor at law, the sum of \$400, to invest for her at lawful interest. On or about the first of May, 1851, the defendant, BALDWIN, made application to G. C. MILLS, residing in the same place, to procure a loan for him for \$400 for two years, on his note,

with other defendants as sureties. MILLS agreed to make the effort, and applied to WILLIAMS to obtain the loan. WILLIAMS said he had the amount wanted to loan for a lady, but he preferred to loan the money on bond and mortgage, as in that event he should receive, to his advantage, compensation for drawing bond and mortgage, and examining the title to the property mortgage. MILLS stated that the money was wanted on a note, and who would be the parties to it, and that BALDWIN has offered to compensate him for procuring the loan; and it was agreed between MILLS and WILLIAMS that if WILLIAMS would lend the money on the note, he should have \$25 as attorney's fees. WILLIAMS then agreed to make the loan. MILLS called afterwards upon WILLIAMS with the note, and WILLIAMS gave him his check for the \$400, which was paid. MILLS handed BALDWIN the \$400. On being asked by him what were the charges, MILLS replied \$40, which BALDWIN then paid him. BALDWIN did not know how it was disposed of by MILLS, who kept for himself \$15, and paid WILLIAMS \$25. Judgment was ordered for plaintiff, and the defendant appealed.

The substance of the opinion of the court was as follows :

It is the essence of an usurious transaction, that there shall be an unlawful and corrupt intent, on the part of the lender, to take illegal interest; and so we must find before we can pronounce the transaction to be usurious.

When, indeed, the contract, upon its very face, imports usury, as by an express reservation of more than legal interest, there is no room for presumption, for the intent is apparent, *res ipsa loquitur*. But when the contract, on its face, is for legal interest only, then it must be proved that there was some corrupt agreement or device or shift to cover usury. Now, in this case, we see that the plaintiff never intended to violate the law, never authorized any such violation, and never knew or had any intimation that her agent or attorney had violated it. If a master command his servant to do what is lawful, and he do an unlawful act, the master shall not answer, but the servant for his own misbehavior; otherwise it would be in the power of every servant to subject his master to what actions or penalties he pleased. In this case WILLIAMS availed himself of his position as the plaintiff's agent to make a contract on his own account, and for his own individual benefit. In thus dealing he did not act or assume to act as the plaintiff's agent. He required compensation for a service which he alleged he rendered to BALDWIN. It was his individual affair, not that of the plaintiff; and if it was a shift or device on his part to take and receive usurious interest to himself on this loan, he has subjected himself to the penalties of the statute.

But it is urged, with great earnestness and ability, that the plaintiff, by accepting the note, and commencing this suit upon it, has ratified all the acts of her agent, connected with the loan, and attendant upon its inception. We have looked carefully at all the authorities cited by the learned counsel for the defendants, and we think they fail to sustain the proposition contended for.

The plaintiff, by receiving and accepting the note for the amount of her money, and which she loaned through her agent, only ratified the contract of loan at the rate of interest expressed in the note. She had no knowledge of, and cannot be held to have ratified the payment, by

BALDWIN's agent to WILLIAMS, of the \$25 usuriously by him taken, as is said. We think the cases fully sustain this view of the plaintiff's act, in receiving the note, and commencing suit thereon. The court, in the opinion, goes on to state many other grounds for its decision, but we deem it unnecessary to reproduce them here.

INSURANCE.

Mutual Insurance.—In the last volume of the *Reports of the Court of Appeals of the State of New-York*, (21 *New-York Reports*,) we find reported several cases of considerable importance to all interested in the system of Mutual Insurance.

First.—We would refer to the case of *BANGS, Receiver, vs. SKIDMORE*, (21 *N. Y. R.* 136.)

Parties insuring in a mutual insurance company, as is well known, generally take a policy for a term of years and give a premium note in full or part payment of the premium. The premium note thus given becomes a part of the assets of the company, liable to be assessed for its proportion of the losses which may happen during the life of the policy issued on the note. The case here referred to, (*BANGS, Receiver, vs. SKIDMORE*,) was one where a policy had been issued to the defendant for the period of five years, and the defendant gave a premium note for \$420. About five months after the date of the policy, the property insured was totally destroyed by fire, upon which the company paid him the amount insured, deducting his proportion of all losses and incidental expenses which had been incurred up to that time. After this, (that is, after the happening of this fire and the payment of the loss,) other losses by fire occurred upon other property insured by the company, on account of which assessments were made on the premium notes, including the one which the defendant had given, he being charged with \$139 78 as his proportion of those losses.

The defendant insisted that his membership in the company and his liability for any losses incurred ceased when the property was burned—that he was not liable for losses or expenses which were incurred after that time.

The court, however, held that the defendant continued liable to contribute his *pro rata* share to the payment of all losses happening after the burning of his own property and all that happened at any time during the term of five years for which his policy was issued.

The practice in this particular has been, we think, contrary to the principle here laid down. Parties managing these companies have considered that the policy and note expired with the payment of the loss, (where the loss was total,) and that, therefore, the note could not be assessed for any subsequent losses. But as the above is a decision of the highest court of the State, it must, of course, be received as an authoritative exposition of the law, and govern every company in the State, the provisions of whose charter are similar in this respect to the one passed upon by the court.

Second.—*Cash Insurance by Mutual Companies.*—This is another point which has been in litigation in New-York State, the last four or five years, and which the Court of Appeals has now decided, to wit: whether mutual

insurance companies, formed under the general insurance act of 1849, could issue policies on the payment of a cash premium only, and where the insured gave no premium note. Thousands of such policies have been issued by companies, (which have now failed,) organized under the said act, and losses have happened under such policies, which losses are pressed as claims against the companies. Those who desired to repudiate these contracts have urged that they were void, for the reason that a mutual company could not issue a policy without receiving from the assured a premium or deposit note—that the very essence of a mutual insurance company was, “that each of the parties should sustain the relation of an assured party and of an insurer of each of the others.” Where persons give premium or deposit notes and take policies of insurance the notes become a fund out of which losses are paid—each note paying its proportionate share. But if a policy is issued by such a company to one who only pays a cash premium, he contributes no note to the common fund, and therefore in no sense becomes an insurer of the others. A cash or stock insurance company could issue such policies, because they do not intend the assured to become the insurers, (they pledge their cash capital to pay their losses,) but a mutual insurance company (having no capital but premium notes) could not do that class of business without going contrary to the very principle of their existence. Such has been in substance the argument of those who have sought to repudiate these contracts.

The court, however, has now (21 *N. Y. R.* 52, *MYGATT vs. N. Y. PROTECTION INSURANCE COMPANY*,) held that the mutual companies formed under this general insurance law of 1849 had and have the power to issue these two kinds of policies, and in a subsequent case they have also held, (*WHITE, Receiver, vs. HAVENS*, 22 *How. Pr. Reps.* 177,) that the premium notes of these mutual insurance companies must be assessed to pay losses under these notes, as well as the losses under the premium note policies—thus in every way affirming these contracts. The principal points of the opinion of the court are as follows:

I. There is clearly no good reason why the legislature should have provided for so rigid a separation of the two species of insurance companies. That it was never supposed there was any ground of policy which required that mutual insurance companies should be prohibited from receiving cash premiums, is conclusively shown by the course of legislation upon the subject. Acts have been repeatedly passed, conferring upon such companies this power, in the precise terms used by the defendants in their charter. It was conferred upon the Albany County Mutual Insurance Company in 1848, upon the Herkimer County Company in 1850, and upon various other companies in subsequent years. The legislature seems to have been ever ready, upon request, to authorize these companies to receive their premium in cash, instead of premium notes.

II. The question, then, upon this point is, whether those provisions of the act of 1849, already referred to, discriminating to some extent between joint-stock and mutual companies, exhibit an implied intention to prohibit mutual companies from issuing cash policies. It is indispensable for the defendants to maintain the affirmative of this, because, as the power of the companies under section ten, to frame their own charters, is conferred in unrestricted terms, they may, of course, provide for this class of busi-

ness, unless the limitation of this power upon which the defendants insist, is elsewhere found.

III. The court, after examining at length the statute, says: My conclusion, therefore, would be, that if the policy in question is to be regarded as issued to a mere outside party, without any reference in itself to the principles of mutuality, it would, nevertheless, be valid and binding.

IV. The court then goes one step further and says: If, however, we assume the contrary, and suppose it to be indispensable that the mutual principle, as it is called, should be observed in all the policies issued by a mutual company, the result, I think, would not be different.

It is somewhat difficult to ascertain with precision in what this mutual principle, so strenuously contended for, is claimed to consist, as mutual companies have assumed a great variety of forms. But I will suppose, for the purpose of this case, that it involved all the requirements suggested on the part of the defendants.

If it be said that mutuality requires that there should be some sort of ratable equality between those who pay their premiums in cash and those who give notes, this is easily attained. When the present value of a life annuity, or of a right of dower, is estimated upon principles which experience has established, the sum arrived at is, in the eye of the law, just equal to the contingent interest which it represents.

So, when the chances of liability upon a premium note are calculated upon principles similar, if not as exact, a sum is found which may be regarded as equivalent to the contingent liability upon the note. Indeed, all premiums for insurance are calculated upon this principle.

V. Again, it is said that the principles of mutual insurance require that every person insured upon that plan should be, also, himself an insurer; that is, that each person insured must also be an insurer of all his associates as well as insured by them; and it is said that an insured person who has paid a premium of a definite sum, in the language of the defendants' charter, "*in full for said insurance*," and who, therefore, is not responsible for any thing more, cannot be a mutual insurer, because he is not, in any sense, an insurer at all. This argument is based upon what I regard as an erroneous view of the true distinction between a mutual and a joint-stock company.

Indeed, much of the difficulty on the subject has been produced by attaching a meaning to the word mutual, in its connection with insurance, which does not belong to it. A mutual insurance company is simply a company whose fund for the payment of losses and expenses consists not of a capital subscribed or furnished by outside parties, but of premiums mutually contributed by the parties insured.

ANGELL says: "A mutual insurance company, in its origin, was a body of persons, each of whom was desirous of effecting an insurance; and he agreed with the rest of the members to contribute the premiums to a common fund, *on the terms* that he should be entitled to receive out of that fund." (*Angell on Fire and Life Insurance*, sec. 413.) There is not a word about the parties being insurers of each other further than as they were made so by the payment of a cash premium. They made up a common fund by means of their common or mutual contribution, upon which each had a claim for any loss in respect to the property insured. There was no responsibility beyond that, and this is all that is essential to a mutual company. The "mutual principle," as it is called, requires nothing more.

Joint-stock companies have a subscribed capital. Mutual companies do not, but depend upon their premiums. This is what distinguishes them, and whether the premiums are paid in cash or by notes has nothing to do with the distinction.

It is no answer to this to say that mutual companies contemplate only indemnity against loss, and not the accumulation of a fund to be divided among the corporators. This depends upon the manner in which they conduct their business. There is nothing to prevent a mutual company from carrying on its operations with a view to profit and dividends. Indeed, the act of 1849 plainly contemplates that they will, or at least that they may do so, when it provides in section 21 that they may allow to parties contributing a cash capital a "participation in their (its) profits."

VI. But were this question not as clear upon principle as I think it is, it may be regarded as settled by authority. What is claimed on the part of the defendant is, that issuing policies for premiums payable in money is not appropriate business for a mutual insurance company, and at all events, for one which also takes premium notes subject to assessment; that it assimilates such company to a joint-stock company, which the act of 1849 does not permit; and that there is a want of mutuality between those paying cash premiums and those who give notes.

These same questions received the deliberate examination of the Supreme Court of Ohio, in the case of the *OHIO MUTUAL INSURANCE COMPANY vs. MARIETTA WOOLLEN FACTORY*. (3 *Ohio State R., N. S.*, 848.) The court in that case held the contract valid and binding on the company.

VII. But the question under our statute, and in precisely such a case as that now before us, has been passed upon by the Supreme Court of the United States in the case of *THE UNION INSURANCE COMPANY vs. HOGE*. (21 *How. U. S. R.* 35.) The company in that case was incorporated in this State under the law of 1849, and its charter was identical with that of the defendants here. The action was brought upon a policy, the premium upon which had been paid in money. The case appears to have been elaborately argued, and among the objections made by the counsel for the company to the issuing of cash policies, is the following: "That it destroys the principle of *mutuality*, which is the leading characteristic of mutual companies, formed under the laws of 1849, and confounds the operation of a company organized to do business on the mutual plan with that of those companies which are organized on the plan of stock companies, and which are in their nature and principles antagonistic to the mutual companies."

On this point the court of *NELSON, J.*, say: "It is argued, however, that the company in question is a mutual insurance company, as declared by the act; that according to this system the insured must be a member of it; and that a person insured upon a cash premium, without any further liability, cannot be a member.

"*This argument is not well founded* either upon principle or authority. Admitting that the insured must be a member of the company, he is made so by the payment of the cash premium. The theory of a mutual insurance company is, that the premiums paid by each member for the insurance of his property constitute a common fund, devoted to the payment of any losses that may occur. Now, the cash premium may as well represent the insured in the common fund as the premium note;

and this class of companies has been so long engaged in the business of insurance it may well be that they can determine with sufficient certainty, for all practical purposes, the just difference in the rates of premium between cash and notes. These mutual companies, possessing the authority contained in the eighth section of the charter, viz., to take cash premiums, or premium notes, are, at the present day, in operation in several of the States, and it has never been supposed that the mutual principle has been thereby abrogated."

The court gave judgment in accordance with the foregoing opinion.

General Average.—We find also reported in the last volume of the Reports of the Court of Appeals of the State of New-York, (21 *N. Y. R.* 36,) the case of *NELSON vs. BELMONT*, the appeal having been taken from the Superior Court of New-York city.

The decision of the court is one of particular interest to underwriters, shippers and others.

The facts found are as follows: The ship *GALENA* sailed from New-Orleans for Havre, having on board a cargo of cotton and \$30,853 in specie belonging to the defendant. On the afternoon of July 23, 1853, the vessel was struck with lightning in the Gulf Stream, and was found to be on fire in the hold. After attempting to extinguish it by pouring on water, and to stifle it by excluding air, a Danish vessel, in sight, was signalized and visited, and the passengers and their baggage transferred to her, which was completed by eleven o'clock at night. The captain of the *GALENA* then boarded the Danish vessel, and engaged her to keep company during the night, that if the fire was not extinguished he might board her again in the morning. The fire appeared to gain, and at daylight the captain concluded that he could not put it out and must make a port of distress.

An arrangement was then made with the Danish captain, by which he was to take the specie on board his vessel and accompany the *GALENA* into Charleston. This was done because he had the passengers on board, and as a protection to the crew in case they had to leave the ship if the fire burst out. The specie was transferred, because if the fire broke out it might be too late to remove it from the *GALENA*. Both vessels bore away for Charleston, which they reached on the 26th. The fire, meantime, did not appear to decrease. The fire engines of the city poured water into the *GALENA* until she filled and sank to the upper deck. The cotton was covered with water, and absorbed a good deal; very little of it had been previously injured. The captain, after discovering at Charleston the extent of the damage to the ship and cargo, determined to abandon the voyage. He sold the cargo there, and remitted the proceeds.

While in the harbor, and before reaching the wharf, he got the specie from the Danish vessel and deposited it in bank. The action was brought against the defendant, as owner of the specie, for its proportion, on general average, of losses, expenses and damages incurred by the vessel on which it and the rest of the cargo were shipped. The amount due by the specie was \$13,884, in case it was determined that it was liable to contribute, in general average, to the amount paid for the services of the Danish brig, the expenses at Charleston in sinking and raising the vessel, repairs, and damages to the cotton from the water, &c.

The Court of Appeals held the specie was so liable.

The following are the leading propositions laid down by the judge, who wrote the opinion of the court:

First.—In determining this question it will be necessary to recur to the principle upon which general average is based. That principle is, that where several persons are engaged in a joint enterprise, whatever is necessarily done for the common benefit ought to be done at the common expense. It is of the essence of this principle that it looks upon the enterprise as a whole, as an entirety. It is true that in apportioning the loss regard is had to the interest of the respective parties. But in other respects no separate interest is recognised. Until, therefore, some portion of the property has been separated from the rest, so as no longer to have any interest in common with it, every risk, which affects the enterprise as a whole, must be regarded as affecting each portion of the property engaged.

Second.—But if the owner of any portion of the cargo, even after a peril has occurred, and after a series of measures to avert it have been commenced, can succeed in so separating his own property from the rest that it is no longer in any sense at risk, he cannot be held liable to contribute to the expenses subsequently incurred. But in order rightly to apply this rule, it is necessary to ascertain the full scope of the term "at risk." Physical destruction, or direct physical injury to the ship or cargo itself, is not the only risk to which property so situated is exposed. Its value depends, or at least is supposed to depend, in some degree, upon the successful prosecution of the voyage. Whatever threatens the voyage, therefore, is a peril to the entire property. Until that is broken up, unless the property claimed to be exempt is not only separated from the rest, and put in a place of present safety, but entirely disconnected with the enterprise, it must be regarded as still at risk, and liable to contribute.

If the voyage is not abandoned, and the property although separated from the rest and removed from the ship is still under the control of the master, and liable to be taken again on board for the purpose of being carried to its destined port, the relations of the several owners are in no respect changed. The common interest remains, and whatever is done for the protection of that common interest must be done at the common expense.

Third.—The result of these principles, when applied to the present case, is plain. It turns entirely upon the nature and object of the separation of the specie from the ship *GALENA* and from the residue of the cargo when it was placed on board of the Danish brig. I entertain no doubt that such a severance, as would have exempted it from all liability to contribute to the subsequent expenses, might have been effected by the master of the vessel, in the same manner as by the owner himself, had he been present.

The master is the agent and representative of each of the owners in respect to their several shares of the property under his charge, and has the same right which the owners themselves would have to take measures for its preservation.

If, therefore, the captain of the *GALENA* had put the specie on board the brig, not in any event to be returned to him, but to be taken by the brig to its own port of destination, and the latter had then been suffered to pursue its course, the specie would clearly not have been subject to contribution for any subsequent expenditures to save the *GALENA*. And notwithstanding the brig was employed to attend the *GALENA* to Charles-

ton, if it had been distinctly understood between the two commanders that the specie was committed entirely to the custody of the Danish captain, and was in no event to be restored to the care of the captain of the *GALENA*, it would then, also, have been exempt.

But the facts do not warrant this assumption. The case states that "the specie was put on board the brig because it was safer there, as in case the fire broke out it might be too late to transfer it from the ship." The brig was to accompany the *GALENA* to Charleston, and there is nothing from which it can be inferred that it was the intention of the captain of the latter to relinquish his control of the specie.

The fact that he reclaimed and took it from the brig as soon as he arrived in Charleston, tends strongly to the opposite inference. It never ceased, therefore, up to that time, to constitute a part of the cargo of the *GALENA*; and if the fire had been previously extinguished, and the voyage resumed, it would, of course, have been again taken on board and carried forward by her.

The case of *BEDFORD COMMERCIAL INSURANCE COMPANY vs. PARKER*, (2 *Pick.* 1,) *Mass. Reports*, will be found to agree entirely in principle with the foregoing.

ADMIRALTY LAW.

Before the United States District Court for Massachusetts.—In Admiralty.—Jan. 31. *SPRAGUE, J. JOHN DONAHAY vs. WESTON HOWLAND et al.*

This was a libel by the cooper of the whale ship "*MANUEL ORTIS*," of New-Bedford, for his "lay," which, by the shipping articles, was fixed at 1-55. The defence alleged incompetency in the libellant and disrating after trial and examination by the master. It appeared that after about three months of her voyage the vessel arrived at New-Zealand, where the master "disrated" the libellant, and shipped one — Fox, a cooper, at a 1-40 "lay." Fox remained on board about a year.

Held, this is an issue of fact upon evidence very conflicting. My result may surprise both parties. I am not satisfied that the master gave *DONAHAY* a "fair trial" within the meaning of the articles, but this is not very important. As the articles provide that in case of a "disrating" the man shall receive the "lay his services merit," so that I must inquire as to the actual competency of the libellant.

I think the conflicting evidence may be reconciled by supposing the respondents' witnesses to refer to the cooper's acts during the early part of the voyage, and the libellant's to the latter part. In the latter part came the coopering of the oil more particularly, while at the beginning of the voyage the cooper occupies himself more with the line-tubs, boat-buckets and what is called "small work." He made some defective small work certainly, but it is not so clear that he could not attend to the substantial and heavy work of the ship. At the shipment he told frankly the ship agent that he did not know how to do "small work." It favors also the position of the libellant, that he was a New-Bedford man, and his qualifications were entirely open to inquiry and information before the contract of shipment was made. I am satisfied that the libellant acted honestly and with no intent to mislead. On the other hand, I think the

master acted honestly, though not on sufficient inquiry and trial, for the evidence indicates no inducement or provocation to disrate DONAHAY, and employ a more expensive cooper. I consider the evidence afforded by the act of the master as weighty, though not conclusive.

While Fox was on board it appears that DONAHAY worked with him, and after he left there was, until the return voyage, no one rated as cooper in the ship except DONAHAY. During this time the casks were well made and tight—though there is some doubt as to who made particular casks. Without re-stating the evidence, I am, upon the whole, of opinion that the libellant, after the practice and training of the first year, was a competent cooper, and that he was not so before.

I therefore allow him a 1-50 "lay" as cooper's assistant, up to the end of the fourteen months when Fox left, and for the residue of the voyage (eighteen months) I allow the lay fixed by the articles, (1-55,) with costs to the libellant.

Unless the counsel, upon taking time, can agree as to the amount to be decreed upon the above principles, the case will go to an assessor to report the particulars of the proceeds of the voyage, &c. T. M. STETSON, of New-Bedford, for the libellant; R. C. PITMAN, of New-Bedford, for respondents.

LIABILITIES OF OWNERS OF FOREIGN SHIPS.

Before United States Supreme Court, New-York.—March 15. Judge BETTS, sitting in Admiralty. BENJAMIN SUTHERLAND *vs.* THE BRIGANTINE LADY MAUNSEL.

This case came up on a libel by Mr. SAWYER to recover repairs and supplies, and involved a very important question of law as to the right of lien under the late decisions of the Supreme Court of the United States, whether ship-chandlers and others could recover for supplies furnished to a foreign vessel in any of our ports, when it was made to appear that the master or agent of the foreign owner had ample funds in the country to pay for such repairs and supplies. The case was heard at the January term, and briefly noticed in the papers. It was then contended by McMAHON, for the owners, that the agent here had sufficient funds to meet all such claims, and if the creditors did not use due diligence in finding them out, the libellants could not recover in this form of action against the owners.

Judge BETTS delivered an elaborate opinion, in which he says:—This vessel is arrested on a claim by a blacksmith for \$267 42, for materials and labor supplied for her repair. It is admitted that she is a foreign vessel and came to this port disabled, and that the iron and labor furnished at the libellant's shop, and put upon her, were necessary to enable her to complete her voyage home. On her arrival here she was consigned to a Mr. BULLEY, and a contract was made by the master with a shipwright named McMAHON for the repairs. The first question which arises, was the entire repairs independent and exclusive of the materials needed and the work of the blacksmith? The next point is, whether the libellant was a party employed, or whether the labor and material were purchased by his brother, under an agreement with McMAHON, as a sub-contractor, or whether the libellant himself had any interest whatever in the contract? The next and most material point is, whether the libellant

acquired any lien on the vessel, as her owners possessed funds and credit to meet this or other demands? Had the libellant notice of this, or certain means of informing himself? This point is vital to the action.

Up to December, 1856, it was adopted and recognised as maritime law that a vessel in a foreign port, in want of supplies or repairs to render her fit for navigation, and obtaining them on credit, the owners were bound for the debt, the cardinal point being the necessity of the case, and whether the verdict was *bona fide*, or if the creditors set up a lien with knowledge that the master had funds sufficient to satisfy the debt. This was the maritime law of Europe until the last few years, when a most important modification was established. That in addition to the proof of the necessity of the vessel, there must be a proof of the necessity for a credit upon the vessel. The courts have declared this to be essential, and remark: "That circumstances of less pressing necessity for supplies or repairs, and an implied hypothecation of the vessel to procure them, will satisfy the rule, than a loan of money on bottomry for the like purpose."

Held by the Court.—That the power of the master to bind both vessel and owners for supplies and labor without imposing on the creditor the duty of further proofs; but when the condition of the credit exacted from the owners a recompense beyond the ordinary rate of interest, then no lien was allowed unless the usurers proved satisfactorily that the owners had not funds sufficient to satisfy the debt, and moreover that the debt, with its enhanced interest, was both subject to the condition that the vessel should perform her home voyage safely. As the testimony is clear that the owners of the vessel had ample credit and actual funds in the hands of Mr. BULLEY, and the libellant had implied notice thereof, the libel must be denied, with costs.

COLLISION IN THE HARBOR.

Before the Glasgow Sheriff's Court.

The bark WHITE SEA, of Boston, Captain EVANS, while proceeding down the River Clyde, on the 28th of August, in tow of a steamer and in charge of a pilot, carried away the chains of a ferry-boat and caused other damage, in all amounting to £20 16s. 3d. The ferry-boat was worked by two chains and steam-power; one of the chains was used for pulling and the other for guiding the boat, and were attached to separate capstans on one side and ring-bolts on the other. The two chains were thirty feet apart, and passed over wheels in the boat; where there was no strain on them they fell into the river about a fathom from the boat; that, when not used, they lie upon the bed of the river, as they were sixty feet longer than the breadth across. It was when the chains were on the bottom that the WHITE SEA ran foul of them, and caused the damage for which she was sued.

The court decided that the bark was not liable:—First, because she was in charge of a pilot; second, because the ferry-boat had no right to impede the navigation of the river by chains; and third, because the vessel was properly managed. On the other hand, if the WHITE SEA had sustained any damage, the owners of the ferry-boat would have been liable for the consequences.

MARINE POLICY.—USAGE.—OPEN POLICY.

Before the Supreme Judicial Court of Massachusetts.

A policy of insurance, by which an insurance company caused a party, for whom it may concern, to be insured, lost or not lost, fifteen thousand dollars on property on board vessel or vessels, steamboat or steamboats, or land carriage, at and from ports or places to ports or places—"All sums at risk under this policy to be endorsed hereupon, and valued at the sum endorsed"—"Premium, such per cent. as shall be written against each endorsement," is not specific enough in its terms to be a valid open policy, and to compel the insurers to make an endorsement after the goods are known to be lost.

Such a policy is merely an inchoate contract, about which matters material to its consummation are to be settled by the parties before each endorsement, and may properly be considered a new and separate insurance on each successive parcel of goods as they are endorsed on the policy, and at a rate of premium agreed upon at the time, written against each endorsement. Evidence as to usage in respect to running policies that the premium is to be at the market rate cannot be admitted where the provisions of the policy are such as these. When a policy is upon a specified kind of goods, to be brought in a certain kind of ships, within a stated time, from a certain port named, and with a rate of premium fixed, leaving nothing but the quantity and value of the goods to be declared and endorsed on the policy as invoices may be received, is legal in effect, as embracing any such goods as might be lost, and known to be lost before they were endorsed on the policy. **JAMES HARTSHORNE, Jr., et al. vs. SHOE AND LEATHER DEALERS' INSURANCE COMPANY.**—*Law Reporter, Boston.*

LIABILITIES OF SHIP-OWNERS.

Before the Supreme Judicial Court for the Commonwealth of Massachusetts.—January Term, 1860.

By the common law, owners of vessels are responsible to other persons for injuries to their property, resulting from the tortious acts of the master or mariners, to the full extent of the damage thereby occasioned. The act of Congress of 1851, ch. 43, (*9 Stat. at Large, 835*), does not vary this liability of ship-owners, except as to the amount of compensation which may be recovered of them. Part-owners are under the same joint responsibility as at the common law. The ship and freight are to be estimated at their value immediately before the tortious act committed. In the assessment of damages, no deduction will be made from the value of the ship on account of a pre-existing incumbrance upon it. **ANDREW SPRING, et al. vs. THOMAS H. HASKELL, et al.**—*Law Reporter, Boston.*

MARITIME LAW.

Before the District Court of the United States, District of Massachusetts.—In Admiralty.—February, 1861.

The mate and engineer of an enrolled steamer, employed in towing vessels in and about the harbor of Boston, have a maritime lien upon the steamer for their wages. Such lien extends to the boiler, notwithstanding

the claim of the makers, who put it into the steamer under an agreement that it should continue their property until paid for, with a right to remove it should any instalment be overdue, and instalments are unpaid and overdue. The lien of the seamen is not impaired by knowledge of such agreement. The steamer *May Queen*, *McKay et al.*, claimants.—*Law Reporter, Boston.*

COLLISION.—CHANGE IN THE RULE OF DAMAGES.

Before the United States District Court for New-York.

The rule of general law which gave damages for a collision to the full amount of the injury is superseded by the statute of 1851, which limits the recovery to the amount of the interest of the owners in the colliding vessel and her freight pending at the time of the collision, and the power of the court to award greater damage is abolished by positive law. *Cook vs. Mallory.*

COLLISION AT SEA.—ACCIDENT.—LIABILITY OF OWNER.

Before the British Admiralty Court, London, March 4, 1861. Before *Dr. Lushington* and *Trinity Masters*.—Case of the *Diana*.—Collision.

This was an action brought by the owners of the bark *Clara Wilsnach*, of Rostock, in Mecklenburg, against the screw steamer *Diana*, of Hull, of 292 tons, to recover compensation for the damage sustained by a collision which happened between the vessels in Grimsby Roads on the evening of the 27th of February, 1860. The bark was bound to Varna with a cargo of coals from Grimsby, and was towed out of the dock in charge of a licensed pilot, and afterwards brought up in Grimsby Roads. The steamship was on a fishing voyage from Hull to Greenland, and came into Grimsby Roads on the day of the collision, in charge of a Hull pilot.

The plaintiffs alleged that the *Diana* came down the Humber, and brought up astern of the bark within three ships' lengths of her, and that the steamer had plenty of room to choose a wide berth. The tide was then at ebb, and running to the southeast; the wind was blowing strongly from the northwest. On the afternoon the tide turned and set to the northwest, and the *Clara Wilsnach* then swung with her stern to the southward, and cleared the *Diana*, and rode athwart the tide with her head to the northeast and with her foretopmast staysail set. The *Diana* began to swing with the tide with her foretopmast staysail set, and came stem on under the bark's foreyard on the starboard side, and with her jibboom injured the bark.

On the part of the plaintiffs it was contended that the collision was caused by the steamer giving the bark a foul berth. The defendants maintained that the blame was attributable to the *Clara Wilsnach*, and that the steamer had, and was, by the Hull Pilot Act, compelled to have a duly qualified pilot on board, under whose direction the steamer was brought up and managed, and that by the 388th section of the Merchant Shipping Act they were not liable for the damage. There was a cross-action by the *Diana* against the *Wilsnach*. *Dr. Deane, Q. C.*, and *Mr. Vernon Lushington* were for the plaintiffs; and *Mr. T. Rutherford* and *Mr. E. Clarkson* for the *Diana*.

His Lordship, in addressing the elder brethren, said that the questions at issue were entirely of a nautical character, and they only could determine them. Dr. LUSHINGTON, after conferring with the Trinity Masters, stated that they were of opinion that the *DIANA* was solely to blame, and that both the pilot and master were greatly to blame, and he decreed accordingly.

COLLISION AT SEA.—RIGHT OF WAY.

Before the British Admiralty Court, February 9, 1861. Before Dr. LUSHINGTON and TRINITY MASTERS.—Case of the bark *MERCK*.

This was an action brought by the owners of the ship *ACME*, of Glasgow, of 1,119 tons, against the bark *MERCK*, of Hamburg, of 320 tons, to recover compensation for the damage sustained by a collision between the vessels, which happened in the English Channel, between Portland Bill and the Start Point, on the morning of the 25th of September last. It was alleged by the plaintiffs that the *ACME* was on a voyage from Quebec to London, with a cargo of deals, and on the morning of the accident she was proceeding up the Channel, on the port tack, steering E. $\frac{1}{2}$, and going at the rate of about six knots an hour. She exhibited her regulation lights, but before the collision with the *MERCK* she had come in contact with another vessel, by which her port light was carried away, but the bowsprit light was substituted for it. A short time before the collision took place the *ACME* observed the red light of the *MERCK* nearly right ahead, and she ported her helm; soon afterwards the red light disappeared, and the bark's green light appeared two or three points on the *ACME*'s port bow, and the *MERCK*, with her stem, ran right into the *ACME*, striking her cutwater, carrying away her bowsprit, and causing considerable damage. The weather was dark and rainy. The plaintiffs attributed the collision to the *MERCK* having starboarded her helm. The *MERCK* was on a voyage from Hamburg to Rio Janeiro, with passengers and a general cargo. In proceeding through the Channel on the morning of the collision she had a green light exhibited on her starboard side and a red one on her port side. The *MERCK* observed the green light of the *ACME* at the distance of about half a mile, and at least three points on her starboard bow. The helm of the *MERCK* was then slightly starboarded, on the supposition that the *ACME* would pass well to her windward. After the helm had been put to starboard the red light of the *ACME* came in sight broad off the bark's starboard beam, and that vessel ran stem on into the *MERCK*'s starboard side amidships, causing her great damage. The injury done was so great that the passengers and crew were taken on board the *ACME*, and the *MERCK* was afterwards towed into Portsmouth. The *MERCK* denied the allegation of the plaintiffs that she with her stem struck the cutwater or any other part of the *ACME*. The defendants contended that the collision was caused by the *ACME* attempting to cross the bows of the *MERCK*, instead of passing to windward of her.

Dr. TWISS, Q. C., and Mr. VERNON LUSHINGTON were for the plaintiffs; and Dr. DEANE, Q. C., and Dr. WAMBEY for the *MERCK*. There was a cross-action at the instance of the *MERCK*.

The judge, in addressing the Trinity Masters, said that the question

they had to consider was whether, assuming the statements of the *MERCK* to be correct, that vessel was justified in starboarding, instead of porting her helm at the time she did. His Lordship and the Trinity Masters were of opinion that, in the circumstances, the *MERCK* was justified in starboarding, and that the blame of the collision rested entirely with the *ACME*. Decree was pronounced accordingly.

DAMAGES FOR DETENTION.

In January, 1861, the French Tribunal of Commerce gave a decision of interest to travellers. An advocate of Paris, named HUBBARD, had occasion, in February last, to go to Madrid on business, and he afterwards proceeded to Alicante to take the steamer of the Messageries Impériales for Marseilles, which was advertised to leave at noon of the 17th of the month. But on presenting himself at the office of the company in the morning of that day, he learned that the steamer had left on the previous evening, and he had to remain six days in the town before he could get a passage to Marseilles. For the loss of time, the inconvenience and the expense thus occasioned, he called on the Tribunal to condemn the company of the Messageries to pay him 2,000 francs. The company represented that it had been obliged suddenly to modify the times of departure in obedience to orders from the Minister of War, and consequently that it was not responsible. The Tribunal, however, held that the company was bound to advertise the modification, and condemned it to pay the plaintiff 200 francs and costs.

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Before the Supreme Judicial Court of Massachusetts.

An author has at common law a property in his unpublished works which he may assign, and in the enjoyment of which equity will protect his assignee as well as himself. This property continues until, by publication, a right to its use has been conferred upon or dedicated to the public. The sole proprietorship of an author's manuscript and of its incorporeal contents, wherever copies exist, is, independently of legislation, in himself and his assigns, until he publishes it. An unqualified publication, such as is made by printing and offering copies for sale, dedicates the contents to the public, except so far as protection is continued by the statutes of copyright.

But there may be a limited publication, by communication of the contents of the work by reading, representation or restricted private circulation, which will not abridge the right of the author to the control of his work, any further than necessarily results from the nature and extent of this limited use which he has made, or allowed to be made of it. In the absence of legislation, when a literary proprietor has made a publication in any mode not restricted by any condition, other persons acquire unlimited rights of republishing in any modes in which his publication may enable them to republish. The representation of a dramatic work, of which the proprietor has no copyright, and which he had previously caused to be publicly exhibited for money, is no violation of any right of property, although done without license from such proprietor, and not being done in violation of any contract or trust, cannot be restrained by injunction.—*LAURA KEENE vs. MOSES KIMBALL.*

LIABILITY OF SHIP-OWNERS.

Before the Supreme Judicial Court of Massachusetts. January Term, 1861.

In Massachusetts, it is the well-established law that underwriters insuring vessels against perils of the sea, are bound to reimburse to the assured the amount which he has been obliged to pay the owners of another vessel for damages to such vessel suffered in a collision with his own, caused by the master or mariners of his own vessel. By the common law, the whole damage in such cases, though it infinitely exceed the value of the ship and freight, may be recovered of the owner of the vessel in fault; but no such liability extends to the person or persons who are owners of the freight merely. This common law liability is not changed by the act of Congress of 1851, ch. 43, (9 *Stat. at Large*, 635,) limiting the liability of ship-owners. This act creates no new liability. Its effect is merely to limit the liability of those who were previously liable for the tortious acts of the master, mariners and passengers on board their vessel.

The privilege given by the statute to the ship-owner to exonerate himself from individual liability and to cause legal proceedings against himself to cease, by the surrender and transfer of the ship and freight, is not given to one who is responsible for damages resulting from collision, but is strictly confined to cases in which freighters, or other owners of property, have sustained losses in consequence of its embezzlement or destruction by the master, mariners or passengers on board the ship. Therefore, when there has been a collision, and the owner of the vessel in fault has paid the decreed damages, the amount so paid may be recovered by the owner of the vessel from his insurers, and should not be apportioned upon the aggregate value of the ship and freight. In such cases, the value of the vessel is to be estimated in the condition in which it was immediately before the occurrence of the collision. *HORTON D. WALKER vs. BOSTON INSURANCE COMPANY. SAME vs. HOPE INSURANCE COMPANY.—Law Reporter.*

THE STAY LAW OF MISSOURI.

The Supreme Court of Missouri has rendered an important decision on the constitutionality of the stay law recently passed by the legislature of that State. The question came up in the case of *BOXLEY vs. STEPHENS*, in which a judgment was rendered last October by the Supreme Court against the defendant for \$11,761 66. A portion of the sum had been paid without levy, and execution had issued for the remainder. Under these circumstances a motion was made to prohibit the sheriff to sell the property of the applicant, the motion being based upon the stay law, which provides that all executions issued at the time of its passage shall be returnable to the second term after the date of the writs, and that no real estate shall be sold within fifteen days of the return day. After citing former decisions of the Supreme Court of Missouri and the decisions of the United States Supreme Court bearing on the case, the court overruled the motion on the ground that in its application to past contracts, upon which judgment has been obtained and execution issued, the act is unconstitutional. The motion was, therefore, overruled.

COMMERCIAL AND INDUSTRIAL CITIES.

NO. LXXIX.—TORONTO, C. W.

THE business of the Canada cities during the past year has become more active in consequence of the large and favorable crops, which have enabled the discharge of the remaining obligations resulting from the revulsion of 1857, and have stimulated an increased business. This recovery manifests particularly the business of the city of Toronto, which enjoys great advantages in respect of the Western trade. The *Toronto Globe* remarks, that the grain crop of 1860 was the largest ever harvested in Canada. Not only of wheat was the yield large and of good sample, but all other grains were produced in much larger proportion than in any previous year. It so happened, for the Canada farmers fortunately, that from the time that the first load of the new grain was brought to market until the season of navigation closed, high prices were paid for every product sold. The abundance of the crop and the good prices which were realized induced large deliveries throughout the autumn, stimulated by the anticipated failure of the English crops. This activity of sales at high prices caused the amount of money in circulation in the country to increase from a little over ten millions of dollars, at the end of August, to nearly fifteen millions at the commencement of November—an increase of nearly five millions of dollars in sixty days. Eleven and a quarter millions was the highest point which the circulation reached during 1859, and ten and three quarter millions the highest in 1858. At no time in the history of Canada has the increase of the amount of money in circulation been so rapid as during the period first referred to; and it indicates with what animation the grain trade of the autumn was conducted, and the extent of the deliveries made by farmers.

The political events in the United States have caused, however, a great check upon the business operations. The circulation of the banks was put out upon Canada produce, that has, to some extent, failed to find a market, and lies unsold in New-York, dependent yet upon the turn the export trade may take. The actual grain business of Toronto in the past year has been as follows:

Quantity and Value of Flour reduced to Wheat, added to the other Grains.

	Bushels.		Value.
Wheat, in flour,.....	895,550	} at \$1 15,	\$2,897,712
Wheat, in grain,.....	1,192,417		
Barley,.....	234,144	at 60 c.	140,486
Peas,.....	148,826	at 50 c.	74,413
Oats, say.....	50,000	at 25 c.	12,500
Totals in 1860,.....	2,517,937		\$2,625,111
Totals in 1859,.....	1,340,723		1,434,017
Increase last year,.....	1,177,214		\$1,191,094

This shows a growth in the trade of nearly one hundred per cent.

range of audibility of various sizes of cannon and charges of powder, conducted in March, under the superintendence of Master-Gunner FINLAY. The discharges began at half-past 10 A. M., and were continued every hour till half-past 3 P. M. The first three shots of the six were fired from a twenty-four-pounder, close to the flagstaff on the Half-Moon Battery, and pointing in the direction of the Calton-hill, in order, as far as possible, to embrace equally within the range of its sound both the Old and New Town. The last three shots, beginning at half-past 1, were fired from an iron eighteen-pounder, on the Forewall Battery, five or six guns to the north of the flagstaff, but pointing nearly in the same direction as the other. The first shot from the twenty-four-pounder, with a charge of 6 lbs. of powder, was not only audible over the whole city, but, we learn, was distinctly heard by a gentlemen standing at the gate of Dalkeith Palace. The charge of the second shot, at half-past 11, was increased to 8 lbs., and the report in this case is stated to have been heard by another gentleman at Gallowshall-toll, in the vicinity of Dalkeith. It was also heard by numerous gentlemen in their own houses, at the extreme north of the New Town and at Newington, as well as by people in Leith, and it was the opinion of the gunners that it would likewise be easily heard in Burnt Island. In the third shot the 6 lbs. charge was reverted to. In the discharges from the eighteen-pounder only 4 lbs. of powder was used. The reports were sharp and clear, within a moderate distance; in some quarters of the city they were either heard very indistinctly or not heard at all. Probably the experiments made will suffice to decide as to the position and calibre of the gun to be used and the weight of the charge. Arrangements are, in the mean time, being made for connecting the gun with the Royal Observatory, on the Calton-hill, and the time-ball on NELSON'S Monument, by means of an electric wire, and for preparing the mechanism by which it is to be fired. Already an electric wire (by means of which constant communication is kept up between the Edinburgh Royal Observatory and that at Greenwich) has been carried over the side of the Calton-hill to the North British Railway, and an estimate is being prepared by the Electric Telegraph Company as to the expense of carrying an insulated wire from this point over the house-tops to the Castle. It is anticipated that every thing will be in working order within, at most, a month from this time, and that daily thereafter the inhabitants in every quarter of the city will be enabled, without leaving their houses, or the avocations in which they may chance to be engaged, to set their clocks and watches according to the correct Greenwich time. It is calculated that the annual cost of the audible time-signal will be altogether about £40. The sum already collected (chiefly through the exertions of Mr. HEWAT and other members of the

pleased to adopt as the authenticated night-signals of Her Majesty's ships of war for future use, WARD's patent signal telegraph lanterns, and that an order had been issued for a full supply, in sets, for the newly-appointed Rear-Admiral SMART's division of the Channel fleet, to be executed forthwith. Considerable pains have been taken by various members of the board, and also by Commodore DRUMMOND, during the past year, in investigating and improving the new signals, and bringing them to their present state of perfection; and all who have witnessed the series of experiments which has been carried out, and the progressive alterations introduced from time to time, are unanimous in their decision that no other change can add to their utility and value.

MARINE INSURANCE.

The following official despatch from the United States consul at Hamburg to the Department of State furnishes some interesting details respecting the practice of underwriters at that port:

"The premium charged on first class A No. 1 vessels is $7\frac{1}{2}$ per cent. per annum; but underwriters here would refuse to take, at this rate, any American (United States) vessel, because they know that there are few hands on board who are thorough sailors, many of them never having been to sea before, and even their captains very often knowing nothing of seamanship, leaving the whole command in reality to the masters.

"Hamburg masters, as well as mates, have to undergo very strict examination before they are allowed to take command. The same is true of Denmark, Sweden and Prussia; their vessels are consequently considered by Hamburg underwriters just as good risks.

"The premium from Hamburg to New-York and home is, in the summer season, two per cent., and rises in the winter to three and a half per cent. All losses are paid in full; there is no deduction made of total loss. If total loss, the amount insured is paid within two months after the underwriter receives notice of the damage. On the cargo (hulk of the vessel) the adjuster of averages, a sworn city officer, deducts one-third for use, which is taken to be the betterment of the vessel.

"Any average, either particular or general, must rise to three per cent. to be recoverable; but Hamburg underwriters are bound to pay any foreign statement, correct, according to the laws of the port of destination. This is a great advantage to the insured over the English policies, which recognise only the statement made according to their own laws.

"Hamburg laws and customs, as to insurance, are looked upon as the best, and for this reason the greater part of Northern Europe, viz., Holland, Denmark, Sweden, Lubeck, Prussia, and even Russia, have adopted the major part of them, and many parties and companies in these countries sign their policies 'according to the Hamburg customs.' The underwriters of Hamburg sign their policies according to the 'recognised con-

This exceeds, to a very large extent, the amount shipped in last year, or in any two years previous, and we may congratulate those in Canada interested in this important trade on the success of the season, so far as they were concerned.

The prosperous state of the crop markets during the year affords a basis for the considerable expansion of the banks of Canada, as is manifest in the following table :

BANKS OF CANADA.

1860.	Capital.	Loans.	Specie.	Circulation.	Deposits.
January 31,	\$23,096,597	\$41,332,011	\$3,134,259	\$10,660,770	\$12,853,440
Feb. 29,....	23,929,433	41,589,369	3,227,271	10,547,073	13,077,663
March 31,...	34,095,998	41,797,305	2,963,758	10,411,866	13,161,734
April 30,...	24,141,044	41,250,858	3,556,428	9,921,898	14,159,773
May 31,....	24,308,197	40,422,275	4,356,679	9,478,440	15,195,901
June 30,....	24,401,062	30,603,290	4,531,337	9,769,304	15,956,923
July 31,....	25,383,303	40,041,080	4,863,998	10,323,244	15,828,588
August 31,...	25,449,126	42,764,831	4,625,516	10,739,934	15,848,991
Sept. 30,...	25,527,439	41,803,711	4,661,424	12,998,388	15,633,800
October 31,...	25,605,627	43,002,202	5,006,562	14,756,242	16,989,502
Nov. 30,...	25,634,924	44,111,584	5,012,129	13,642,576	17,394,613
Dec. 31,....	25,669,719	44,280,744	4,348,566	12,532,298	16,024,705

The loans and circulation took a very decided expansion, and a movement that could not but promote a fair import trade, the promise of which was clouded by the turn of political affairs in the United States. The dry goods importations of Toronto were, as compared with those of the three previous years, as follows :

	1860.	1859.	1858.	1857.
Cottons,	\$ 826,438	\$ 771,476	\$ 483,612	\$ 918,753
Carpets,	13,831	16,741	8,087	75,964
Clothing,	10,394	13,192	19,427	48,968
Cotton yarn and warp,...	21,342	19,438	18,298	12,320
Hosiery,	6,882	2,338	6,778	6,980
Linens,	58,707	47,329	30,638	59,784
Millinery,	48,314	38,943	14,764	35,548
Oil cloths,	5,485	4,090	3,562	3,636
Silks and satins,	1,352	1,388	.....	2,106
Velvets,	189,165	195,984	127,061	253,108
Small wares,	15,714	12,701	27,745	32,860
Straw goods,	32,785	25,985	17,861	35,348
Woolens,	573,067	525,920	402,877	651,988
Hats, caps and bonnets, ..	42,669	31,995	21,386	.....
Totals,	\$ 1,846,150	\$ 1,708,518	\$ 1,182,086	\$ 2,100,600

This shows an increase last year over 1859 of \$134,088, and over 1858 of \$653,930, and compared with 1857, a falling off of \$243,144. The increase in the imports of dry goods last year over those of 1859, \$134,000, is not nearly as large as might be expected in view of the increased extent of trade done during the year. But the reader must remember, that it was only in the fall months that the business was at all pushed, and the above increase must be attributed to the importations for the fall trade entirely. Had the business been as brisk throughout the year as during the three months after harvest, or had the spring been at all an average one, the importations would have shown a much greater increase.

The following are the comparative imports of the leading articles of the grocery trade for the past four years:

	1860.	1859.	1858.	1857.
	Value.	Value.	Value.	Value.
Ale, beer and porter,.....	\$ 462 ..	\$ 1,101 ..	\$ 238 ..	\$ 880
Blacking,	361 ..	97 ..	75 ..	40
Brandy,	1,244 ..	1,157 ..	8,432 ..	5,737
Candles, other than tallow,..	2,828 ..	350 ..	657 ..	5,386
Segars,	2,327 ..	1,520 ..	4,521 ..	5,000
Chicory,	207 ..	947 ..	112 ..	.....
Coffee, green,	22,058 ..	52,282 ..	52,695 ..	34,000
" ground or roasted,...	.....	4 ..	80 ..	.....
Cocoa and chocolate,	477 ..	310 ..	138 ..	672
Cider,	193 ..	417 ..	242 ..	356
Corks,	1,957 ..	2,162 ..	2,437 ..	1,264
Cordials,	25 ..	53 ..	7 ..	242
Dried fruits and nuts, all kinds,	33,582 ..	17,961 ..	21,569 ..	16,216
Fish of all kinds,	7,500 ..	1,382 ..	3,904 ..	5,212
Gin,	178 ..	589 ..	2,251 ..	1,076
Molasses,	5,028 ..	9,310 ..	10,468 ..	10,208
Maccaroni, &c.,	28 ..	46 ..	48 ..	104
Mustard,	817 ..	1,135 ..	152 ..	1,300
Oil, any way rectified,	14,182 ..	30,778 ..	33,843 ..	18,152
Oil, fish, crude,	50,121 ..	23,037 ..	972 ..	29,872
Oils, cocoa, pine and palm, ..	6,774 ..	18,467 ..	7,792 ..	6,032
Paints and colors,	15,359 ..	15,139 ..	18,227 ..	34,556
Pickles and sauces,	368 ..	124 ..	169 ..	4,852
Pitch and tar,	1,163 ..	751 ..	726 ..	884
Rice,	4,584 ..	3,002 ..	4,487 ..	6,868
Resin and rosin,	4,696 ..	5,107 ..	3,342 ..	1,136
Rum,	377 ..	427 ..	322 ..	668
Salt,	31,229 ..	24,389 ..	46,425 ..	30,404
Snuff,	295 ..	377 ..	488 ..	1,744
Soap,	3,608 ..	1,694 ..	607 ..	2,180
Spices of all kinds,	6,366 ..	6,578 ..	5,556 ..	3,028
Starch, &c.,	7,979 ..	6,827 ..	2,541 ..	1,964
Sugars, raw,	199,947 ..	149,058 ..	207,593 ..	244,672
" refined, or equal to,...	1,379 ..	18,658 ..	23,009 ..	11,336
Tallow,	53,347 ..	41,598 ..	57,892 ..	70,724
Teas,	159,572 ..	330,018 ..	330,763 ..	210,386
Tobacco, manufactured,	80,376 ..	81,320 ..	94,742 ..	70,092
" unmanufactured,	10,168 ..	18,288 ..	21,321 ..	16,072
Tobacco pipes,	1,785 ..	1,557 ..	56 ..	.....
Turpentine,	6,631 ..	5,721 ..	127 ..	5,680
Vinegar,	1,849 ..	742 ..	1,299 ..	1,344
Wine, in wood,	10,329 ..	11,603 ..	35,635 ..	28,924
" in bottles,	3,914 ..	5,207 ..	7,957 ..	8,204
Whiskey,	435 ..	350 ..	2,671 ..	4,472
	<hr/>	<hr/>	<hr/>	<hr/>
	\$ 735,440	\$ 882,504	\$ 1,060,468	\$ 901,737

The grocery branch of business has also been increased, and the results satisfactory, although the aggregate presents a decline, which arises solely from the decrease in tea and coffee, and must be accounted for by the fact that very extensive importations of coffee were made prior to the enforcement of the new tariff, in order to avoid the increased duty; while for teas, the anticipated advance in prices during the fall of 1859, and the low rates which were then prevailing, induced large purchases just before the close of last year, which stocked the market, so that the spring importations were unusually light. This circumstance, with considerable

purchases of the direct importations from China at Montreal, and the diminished consumption above alluded to, will explain the apparent decrease in the extent of the trade in these articles.

There has been, also, a fair business in the hardware trade. The following table exhibits the imports at Toronto of the principal articles for the past three years:

	1860.	1859.	1858.
Iron, Canada, and tin plates,	\$ 18,620	\$ 11,321	\$ 3,290
“ galvanized and sheet,	2,891	2,638	490
“ wire, nail and spike rod,	2,926	1,708	1,620
“ bar, rod or hoop,	27,957	36,982	35,044
“ boiler plate,	511	821	1,964
Steel, wrought or cast,	5,106	4,922	1,749
Tin, granulated or bar,	238	382	5,067
Zinc, in sheet,	27	683	1,257
Brass, in bars, rods and sheets,	207	982	1,006
“ or copper wire,	506	835	231
Copper in sheets, &c.,	4,411	3,472	....
“ brass or iron tubing,	5,437	7,837	1,324
Tin and zinc in pigs,	2,963	2,498	1,468
Pig iron, lead and copper,	10,793	1,372	....
Cordage,	5,238	6,231	7,443
Cutlery,	16,443	13,415	5,526
Japanned and Britannia ware,	2,399	1,799	1,262
Spades and other implements,	3,069	7,888	3,512
Spikes, nails, &c.,	10,667	12,832	4,103
Stoves and iron castings,	9,693	11,249	14,771
Manufactures of hardware, iron, brass or copper, .....	....	105,687	99,111
Other iron and hardware,	111,460	91,783	....

The other branches of Toronto trade present more or less the same features. The leather trade enjoys some advantages. Under the tariff of 1857, hides were charged 5 per cent. in the United States, but imported into New-York they pass from the warehouse free into Canada. Nevertheless, there appears to have been no increase of business in the past year. This, together with the decrease in the importations of boots and shoes, is ascribed to the growth of the home trade.

The aggregate imports for the past nine years is interesting.

Statement of Imports and Duties at Toronto from 1852 to 1860, inclusive.

	Value.	Duty.	Inland.
1860,	\$ 4,048,458	\$ 648,991	\$ 225,736
1859,	4,018,479	588,511	146,977
1858,	3,768,934	461,148	204,441
1857,	5,085,460	578,912	463,180
1856,	6,954,628	760,640	....
1855,	5,605,812	620,340	....
1854,	5,450,824	690,304	....
1853,	4,660,224	624,152	....
1852,	2,557,268	373,232	....

The number of steamboats trading to the port of Toronto, during 1860, was 32, of 10,147 tons, and 673 hands. The sailing tonnage was 22,260, and 896 hands.

Although navigation opened with low rates, still a small profit was returned to the owners of vessels until September, when the abundant harvest began to crowd the storehouses and depots, and freights rose rapidly, and at the close of navigation the losses of two bad seasons had

been, in nearly all instances, made good, and a margin left besides. During the summer, wheat was carried to Oswego for $1\frac{1}{2}$ c. per bushel; after the harvest it rose to 5c. @ $5\frac{1}{2}$ c. Flour to Montreal was carried as low as 15c. per barrel. In October, 45c. was the current rate, and several steamers obtained 50c. for a short time. A larger number of vessels are being rebuilt to replace, in a measure, those lost during the severe gales of last November. Mr. G. H. WYATT, ship broker, reports only three new vessels building on the lake, viz: One at Oakville, owned by HENDERSEN & COLPOYS, 10,000 bushels; one at Wellington Square, owned by McCULLOCH & BAXTER, 11,000 bushels; one at St. Catharines, owned by L. SHICKALUNA, 18,000 bushels. A passenger and freight steamer is also being built on lake Simcoe to replace the steamer Morung.

The passenger business has been divided between the Express line with the mail steamers, and the American steamers on the South shore. The monopoly tried by the Grand Trunk in securing seven of the best passenger steamers by charter, has not proved satisfactory in a pecuniary way, as it is generally known that the steamers made little more than their expenses, leaving the charter money, £35,000, to be provided for. The freight line of steamers has also shared in the improvement of the lake business, and first-class steamers have made very handsome profits. Some of the largest propellers made several trips between Chicago and Montreal, carrying very large freights.

CANADA.

The trade of the whole of Canada was as follows:

	Exports.		Imports.		Duties.
Total, 1860,.....	\$ 34,631,890	..	\$ 34,441,621	..	\$ 4,758,465
In 1859,.....	24,766,981	..	33,555,161	..	4,487,846
Increase in favor of 1860,.....	\$ 9,864,900	..	\$ 886,400	..	\$ 320,619

A few of the chief articles of import, and their value, are given in the next table.

	Quantity.	Value.		Value.
Sugar, refined, lbs.	600,788	\$ 48,318	Linen,.....	\$ 261,824
" other kinds,	31,712,252	1,537,978	Woolens,.....	3,954,066
Tea,.....	3,734,014	1,271,461	Leather, tanned,.....	287,199
Coffee, green,.....	778,789	107,954	Manufactured boots and shoes,	119,927
" other,.....	15,004	2,085	" other than boots	
Cottons,.....		5,750,297	and shoes,.....	124,962

One cannot but remark upon the great value of many manufactured articles; of boots and shoes, \$119,927, and of all kinds of manufactured leather, \$532,000; of hats, caps and bonnets, \$326,420; of clothes, ready-made, \$118,000; paper and paper hangings, \$107,000; starch, \$33,500. Such items show the scope there is for home manufactures. Of cottons we imported \$5,750,297 worth in 1860.

NAUTICAL INTELLIGENCE.

NEW LIGHT-HOUSES IN EUROPE.

NAME.	Place.	Position.	F. or R.	Ht. in Feet.	Dist. seen Mls.	Remarks, &c. [Bearings Magnetic.]
35. Cape St. George,	Australia, east coast,	35° 9.8' S., 150° 4.1' E.	R.	224	19	Established 1st Oct., '60. (a.)
36. Civita Vecchia,	Italy, west coast, Mediterranean.	45° 5.4' N., 11° 47.1' E.	R.	120	16	(b.)
37. Corran Point,	Scotland, W. coast,	.....	F.	86	10	Est. 20th Nov., '60. (c.)
38. Adour River,	On southern pier.	48° 31.8' N., 1° 31.4' W.,	F.	88	6	Est. 15th Nov., '60.
38. Pladda Island,	Scotland, W. coast,	.....	F.	43	11	Est. 20th Nov., '60. On west side of Isle Luing.
39. Cape St. Elias,	Gulf Cagliari, Sardinia,	39° 11' N., 9° 9.8' E.,	Fd.	289	14	Est. 4th Nov., '60. A red flash every two minutes.
40. Cape Kusten-jeh,	Black Sea,	44° 10' N., 28° 39.2' E.,	F.	68	9	Est. 1st Nov., '60.
41. Favignana Island,	Sicily, west coast,	37° 56.8' N., 12° 16.1' E.,	R.	141	20	Est. 24th Dec., '60. Interval once a minute. On Sottile or Mamoni Point.
42. Buffalo River,	South side of entrance,	.....	F.	45	11	Est. 25th Aug., '60. Tower, red and white bands.
43. Mewstone Buoy,	Entrance of Plymouth Sound,	.....	..	..	..	(d.)
1. Port Said,	Egypt,	31° 6' N., 32° 19.6' E.,	F.	66	9	S. E. 29 miles of Damietta, mouth of the Nile.
1. Port Said,	Egypt,	31° 6' N., 32° 19.6' E.,	F.	66	9	Est. recently.
2. Kronstat,	Baltic,	.....	..	..	..	Alterations of the lights. (a.)
3. Gulf of Elga,	.....	.....	..	..	..	Beacons in. (c.)
4. Brindisi, on Pedagne Rocks,	Adriatic,	40° 39.5' N., 17° 59.5' E.,	Fd.	73	12	Est. 31st Jan., '61. Flash once in 8 minutes. A short eclipse precedes and follows the light.
4. On Point Torre de Penne,	Adriatic,	40° 41.1' N., 17° 56.8' E.,	R.	129	20	Est. 31st Jan., '61. Once every half minute.

F. Fixed. Fd. Fixed and Flashing. R. Revolving. I. Intermitting. Est. Established.

(a.) 35.—The notice says that the light shows consecutively a *red*, *green* and *white* light, at intervals of *thirty seconds*. It is visible seaward when bearing between S. S. W. $\frac{1}{2}$ W. and North. It is seen as far as N. by E. $\frac{1}{2}$ E. over a sloping hill situated south of the light-house; but then a vessel must be a considerable distance to the southward of it. In entering Jervis Bay the light will be eclipsed by Bowen Island, forming the south point of entrance, when bearing S. $\frac{1}{2}$ W., and it will only be visible from a portion of the bay, between the bearings of S. S. E. $\frac{1}{2}$ E. and S. E. The white light will be seen in clear weather at a distance of about nineteen miles, and the green and red lights at fourteen miles.

Directions.—Vessels approaching Cape St. George from the southward should always endeavor to make this light, to avoid being embayed in Wreck Bay, the deep indentation westward of the cape. The light will first open over the sloping hill to the southward of it, bearing N. b. E. $\frac{1}{2}$ E.

The cape, which is a low, dangerous, rocky point, must be approached cautiously. When within the distance of about eight miles the light should not be brought to the northward of N. b. W.; for if the vessel should be near the land, to the southwestward of this bearing, the light will be partially, if not wholly obscured, but by standing to the eastward it will gradually open out, and when bearing N. N. W. $\frac{1}{4}$ W. it may be passed with safety at a distance of from one to two miles.

In approaching from the northward, the light will open off Crocodile Head, bearing S. S. W. $\frac{1}{4}$ W., and by keeping it in sight a vessel will pass the head in safety at a distance of from one to two miles.

(b.) 36.—It is visible seaward between the bearings of N. b. W. $\frac{3}{4}$ W. and S. b. E. $\frac{3}{4}$ E., at a distance of about sixteen miles. The eclipses are total beyond the distance of ten miles, but within that range a faint light will always be seen.

Re-establishment of Lights.—The Maritime Inspector of Venice has given notice, that on the 17th October, 1860, the illumination of all the light-houses on the Venetian coast would be re-established.

(c.) 37.—The light will show *red* to the eastward and southward, between the bearings of N. E. b. E. and S. W. b. W. $\frac{3}{4}$ W. nearly, and *white* in every other direction where it can be seen from Loch Eil and Loch Linnhe.

Fixed Light on Phladda Islet.—Also a light will be exhibited from the light-house erected on Phladda Islet, about a mile from the west side of Luing Island, and $2\frac{1}{4}$ miles S. W. from Easdale Island, Argyshire.

The light will show *red* when seen from the northward, or in the direction of the Bogha Nuadh Rock, when bearing between S. b. W. $\frac{1}{4}$ W. and S. S. W. $\frac{3}{4}$ W.; it will show *white* landward when bearing between S. S. W. $\frac{3}{4}$ W. and N. N. E. $\frac{1}{4}$ E.; and it will be *masked* seaward between the bearings of N. N. E. $\frac{1}{4}$ E. and S. b. W. $\frac{1}{4}$ W. The mariner, however, must bear in mind that in approaching it from the southward a faint light will be seen easterly of N. N. E. $\frac{1}{4}$ E.

(d.) 43.—The buoy lies in $7\frac{1}{4}$ fathoms at low water, with the peaks of the Great and Little Mewstones in line bearing E. N. E., and the S. W. end of Picklecombe Fort, in Mount Edgecumbe Park, touching the north side of the breakwater light-house, N. b. W. $\frac{3}{4}$ W.

The inner chequered buoy near the east end of the breakwater has been removed.

(e.) 2.—The Russian Imperial Ministry of Marine has given notice that the following alterations will be found in the lights of Kronstat, on the opening of the navigation in the spring of 1861:

The three *fixed* lights in the midst of the fort of the Emperor Paul I., or Risbank Fort, are to be discontinued.

The eastern light of the Nicholas Battery at Kronslot, that is 45 feet above the mean level of the sea, is to be raised to 58 feet above the same level, and should be visible from the deck of a ship, in clear weather, at a distance of 12 miles.

The western light, which is now 21 feet above the mean level of the sea, will be raised to 23 feet above the same level, but there will be no change in the horizontal range of these lights.

(f.) 3.—The Russian Imperial Ministry of Marine has given notice of the following changes in the beacons of the Gulf of Riga:

Two mast-beacons, to show the direction of the channel into Riga, are surmounted by a triangle with the apex upwards, and over it a small barrel. They are 85 and 87 feet high, and 478 yards apart, in a direction N. W. b. W. $\frac{1}{2}$ W. The N. W. beacon is higher and its base larger than that of the S. E. beacon. They can be seen ten miles distant.

The lower light at Riga has been opened out 30° to the westward, so as to be seen from N. $\frac{1}{2}$ W. to N. W. $\frac{1}{2}$ W.

The following beacons are to be in their places on the opening of the navigation in 1861:

A red broom, turned downwards, on the south side of the banks of Kuno, S. W. $\frac{3}{4}$ S. $6\frac{1}{2}$ miles from the church of St. Nicholas.

A red broom, turned downwards, at $3\frac{1}{2}$ miles south from the end of the Sorkholm Reef.

A black broom, turned downwards, on the coast of Livonia, on a nine feet shoal, S. W. b. W., 2 miles off Cape Taker-ort.

A double broom, red above and white below, on the eleven feet shoal W. b. N. $\frac{1}{2}$ N., 4 miles from the village of Kablukula.

A white broom, placed upright on the seventeen feet bank, N. W. b. N., $3\frac{1}{2}$ miles from the farm of Ainensch.

A double broom, white above and red below, on the end of the reef off the entrance of the River Att Salis, about $6\frac{1}{2}$ miles from the beach, in 26 feet water.

The bearings are magnetic. Variation at Riga, $8^{\circ} 15' W.$ in 1861.

ALTERATIONS IN FRENCH LIGHTS.

From the Moniteur de la Flotte.

Port of Cette Light—Change of Position.—Mariners are hereby informed that on the 15th of February the fixed light of the port of Cette will be removed to the tower recently completed at the mole-head of the port of St. Louis. The neighboring sea light of Fort Richelieu will be established at the same time at the S. W. angle of this fort, in a manner to show, with the light, the course for entering the port. The tower stands in lat. $43^{\circ} 23' 30'' N.$ and long. $3^{\circ} 42' 4'' W.$ The light is 82 feet above the ground and 105 feet above the sea, and may be seen 15 miles distant.

Light of Fort Richelieu.—Is 253 feet to the west of the light-house. Mean height 272 feet; distance seen, 4 miles. These two lights will appear to be one at the distance of about $1\frac{1}{2}$ miles. They will be hereafter replaced by two lights; one of which will stand at the end of the jetty of Fontignan and the other at the end of the breakwater.

Light of Biarritz, Lower Pyrenees.—Navigators are hereby informed that the revolving light of Biarritz, about $2\frac{1}{2}$ miles S. S. W. of the mouth of the Adour, the eclipses of which are now every half minute, will be altered in the month of July next to every twenty seconds, and that the light will be alternately white and red. A temporary light of the same character as the intended light will be shown at the tower while the works are going forward, but that will not be visible so far off as they will be.

IANTHE SHOAL—CAROLINE ISLANDS.

The following extract from the log of the bark *NILE*, confirms the existence of the Ianthe Shoal; but the position given by the *NILE*, although agreeing in longitude, differs in latitude:

Bark *NILE*, *DESTIN*, reports: "Left for sea October 1st; had moderate weather down. February 8th, in lat. $5^{\circ} 31' N.$, long. $145^{\circ} 42' E.$, at 6.15 P. M., passed over a sunken reef, with very little room to spare, the rocks being plainly visible on each side of the vessel, and the man aloft reported breakers on one side. The bark was before the wind at the time, and was only two minutes between the rocks. She was heading in the sun glade, which prevented the earlier discovery of the danger."

As nothing is more likely than that this shoal may extend even thirty miles south of its latitude in the chart, which is so much to the northward of this, the mariner will be cautious in its vicinity.

GLENDINNING SHOAL.

The first account of this discovery, as given by that excellent paper, the *Shipping and Mercantile Gazette*, appeared in our last number. The following notice of it by the Hydrographic Office contains some further particulars worth preserving:

Captain GLENDINNING, of the bark *QUEEN MAB*, of Liverpool, reports that on his passage from Singapore to the Cape of Good Hope, on the 20th October last, in lat. $9^{\circ} 54' S.$, long. $97^{\circ} 50' E.$, he came upon a shoal not marked in any of the charts, and lying in the direct track of vessels coming from the Straits of Sunda, on their homeward voyage. Captain GLENDINNING states, that at 9 o'clock P. M. of the above date he observed the water all around the ship much discolored, in appearance milky white; that he immediately hove the ship up in the wind, had a cast of the hand lead, and got seven fathoms, but the next cast (having run about two miles W. S. W.) had no bottom with the hand lead. The water continuing discolored at eleven o'clock, having run ten miles further to the W. S. W., hove the ship to, and sounded with the deep sea lead in 55 fathoms, hard ground.

Caution.—This shoal lies about 130 miles N. N. E. of the Kneeling or Cocos Isles, and directly in the track of ships on the homeward voyage from China and Singapore, by the Straits of Sunda. As it is most desirable to verify the cast of seven fathoms and to ascertain how far the bank extends, any captain passing this neighborhood is requested to get a few deep sea casts of the lead, and, if time and circumstances will permit, to endeavor to trace the possible connection of the bank with the Cocos Isles. And we may also add, that as the deep sea lead will bear arming, that thereby the nature of the bottom might be ascertained—a very desirable and convincing particular, and one contributing much to the value of deep soundings.

Bearings are magnetic. Variation $0^{\circ} 15' W.$ in 1861.

DANGERS OF THE SEA OVERCOME.

Under provisions of the Naval Appropriation Bill the Secretary of the Navy has purchased, for \$10,000, the right to use "*DAVIDSON'S Boat-*

Lowering, Detaching and Attaching Apparatus," lately patented by Lient. HUNTER DAVIDSON, of the U. S. Navy. This wonderful apparatus, by which a boat can be lowered with perfect safety at sea, under any and all circumstances, will now be offered to passenger steamers, and will no doubt soon come into general use, by which thousands of lives will be saved.

THE COMING OF STORMS.

In the month of March the coast of Great Britain and Ireland experienced a succession of gales which did much injury to life and property.

The *London Times*, in discussing the subject, remarks: "The event was predicted with as much certainty as an eclipse, and could have been announced by signals as conspicuous as fiery beacons. The information was actually telegraphed to several places. Aberdeen, Hull, Yarmouth, Dover, Liverpool, Valentia and Galway were apprised of the pending storm in the plainest terms. Notice was sent to those ports as follows: "Caution.—Gale threatening from the southwest, and then northward.—Show signal drum." Now, as all the points of our coast are connected by telegraphic wires, and as there can be no difficulty in showing signals of this description, we think it highly desirable that the system should be established without delay. The plan, though organized at the Board of Trade, is not yet, we are told, in full practical operation; but as the details, according to the delineation given, cannot involve much trouble or cost, the sooner the scheme is introduced the better.

"Meteorology now rests upon evidence as palpable as that which confirms our theory of astronomy. We believe those theories because the predictions of an astronomical almanac are infallibly verified. An eclipse occurs at the hour and minute set down for it, occultations and transits take place with similar punctuality, and as all things invariably happen according to programme, the truth of the principles on which the science is based becomes evident to all, whether learned or unlearned. We are now in exactly the same position as regards meteorology. We cannot yet forecast the general character of the season, but it seems that we can really foretell a gale three days before it comes, and even ascertain the quarter from which the wind will blow. If we have indeed got to this point—and there appears no reason to doubt it—the rest ought to be easy."

The elements for calculating the advent of a gale are more at command in the United States than elsewhere, since the development of the telegraph has been greater on this continent than on that of Europe. An area, embraced by 45 degrees of longitude and 24 degrees of latitude, is here operated upon by telegraph lines, and by these the indications of approaching tempests may be in an hour concentrated upon any point of the Atlantic coast. The approach of a gale may be anticipated from one to three days, and thus give time for preparations that will suffice to avert damage. The extended list of losses that the marine reports present for the past year are the proof of the great interest which commercial bodies have in this matter. The losses on the lakes during the past year were, in amount, \$1,156,015, an increase of 13 per cent. over the previous year. The science of storms might readily be applied to this as a remedy.

LOSSES ON THE LAKES.

The annual report, presented by Capt. E. P. DORR, Chairman of the Executive Committee, to the Board of Lake Underwriters, shows that during 1860 there was a considerable increase in the losses of property over the year 1859, and that the increase in loss of life is truly fearful, although resulting from great and (apparently) unforeseen disasters:

1859.	
Loss on steam hulls,.....	\$ 169,405
Loss on steam cargoes,	182,180
Total loss by steam vessels,.....	\$ 351,585
Loss on sail hulls,.....	\$ 331,338
Loss on sail cargoes,.....	337,827
Total loss by sail vessels,.....	\$ 668,565
Total loss by steam and sail vessels,.....	\$ 1,020,100
Increase of losses,.....	185,915
1860.	
Loss of life in 1860,.....	578
Loss of life in 1859,.....	105
Increased loss of life,.....	473

Of the 578 lives lost during the past year, 400 are attributed to the disaster of the *LADY ELGIN*.

SCREW PROPELLERS.

The loss of screw propellers during the ten years of lake business shows, first, an increase of this kind of vessels, and second, the decrease in disasters as navigation has improved and knowledge of managing propellers has advanced. Many conclusions will suggest themselves to the underwriter and shipper who may examine the following tabular statement of the number and the losses in dollars:

YEARS.	Amount of Loss.	Wrecked.	Stranded.	Fire.	Damaged.	Jettison.	Collision.	Raised.
1848,.....	\$ 39,000	0	1	1	1	1	1	1
1849,.....	113,000	0	1	1	0	1	0	1
1850,.....	16,000	0	4	1	1	0	3	0
1851,.....	183,200	2	6	0	4	0	10	0
1852,.....	274,050	4	5	3	11	4	8	0
1853,.....	101,500	1	7	0	10	2	4	0
1854,.....	680,100	5	0	2	30	7	8	0
1855,.....	1,159,950	7	11	0	34	4	10	0
1856,.....	893,900	7	19	6	23	2	19	0
1857,.....	254,543	1	17	4	38	1	9	0
1858,.....	91,630	1	1	5	20	2	7	0
Total for ten years,.....		28	73	23	166	24	79	2
Total loss in dollars,.....	\$ 2,752,181							
Total number of vessels,.....	408							

THE TIME GUN AT EDINBURGH.

The *Scotsman* contains the following interesting sketch of the experiments for testing the best position of the signal gun, and the comparative

range of audibility of various sizes of cannon and charges of powder, conducted in March, under the superintendence of Master-Gunner FINLAY. The discharges began at half-past 10 A. M., and were continued every hour till half-past 3 P. M. The first three shots of the six were fired from a twenty-four-pounder, close to the flagstaff on the Half-Moon Battery, and pointing in the direction of the Calton-hill, in order, as far as possible, to embrace equally within the range of its sound both the Old and New Town. The last three shots, beginning at half-past 1, were fired from an iron eighteen-pounder, on the Forewall Battery, five or six guns to the north of the flagstaff, but pointing nearly in the same direction as the other. The first shot from the twenty-four-pounder, with a charge of 6 lbs. of powder, was not only audible over the whole city, but, we learn, was distinctly heard by a gentlemen standing at the gate of Dalkeith Palace. The charge of the second shot, at half-past 11, was increased to 8 lbs., and the report in this case is stated to have been heard by another gentleman at Gallowshall-toll, in the vicinity of Dalkeith. It was also heard by numerous gentlemen in their own houses, at the extreme north of the New Town and at Newington, as well as by people in Leith, and it was the opinion of the gunners that it would likewise be easily heard in Burnt Island. In the third shot the 6 lbs. charge was reverted to. In the discharges from the eighteen-pounder only 4 lbs. of powder was used. The reports were sharp and clear, within a moderate distance; in some quarters of the city they were either heard very indistinctly or not heard at all. Probably the experiments made will suffice to decide as to the position and calibre of the gun to be used and the weight of the charge. Arrangements are, in the mean time, being made for connecting the gun with the Royal Observatory, on the Calton-hill, and the time-ball on NELSON'S Monument, by means of an electric wire, and for preparing the mechanism by which it is to be fired. Already an electric wire (by means of which constant communication is kept up between the Edinburgh Royal Observatory and that at Greenwich) has been carried over the side of the Calton-hill to the North British Railway, and an estimate is being prepared by the Electric Telegraph Company as to the expense of carrying an insulated wire from this point over the house-tops to the Castle. It is anticipated that every thing will be in working order within, at most, a month from this time, and that daily thereafter the inhabitants in every quarter of the city will be enabled, without leaving their houses, or the avocations in which they may chance to be engaged, to set their clocks and watches according to the correct Greenwich time. It is calculated that the annual cost of the audible time-signal will be altogether about £40. The sum already collected (chiefly through the exertions of Mr. HEWAT and other members of the Chamber of Commerce) is about £200, but as this will only carry on operations for a few years, and as government has not as yet bound itself to do more than grant the use of the gun, additional subscriptions are evidently desirable.

NIGHT SIGNALS.

The London *Times* of a late date remarks: Official instructions were recently received at Woolwich from the Lords of the Admiralty by Commodore Superintendent, the Hon. J. R. DRUMMOND, stating that the board had been

pleased to adopt as the authenticated night-signals of Her Majesty's ships of war for future use, WARD's patent signal telegraph lanterns, and that an order had been issued for a full supply, in sets, for the newly-appointed Rear-Admiral SMART's division of the Channel fleet, to be executed forthwith. Considerable pains have been taken by various members of the board, and also by Commodore DRUMMOND, during the past year, in investigating and improving the new signals, and bringing them to their present state of perfection; and all who have witnessed the series of experiments which has been carried out, and the progressive alterations introduced from time to time, are unanimous in their decision that no other change can add to their utility and value.

MARINE INSURANCE.

The following official despatch from the United States consul at Hamburg to the Department of State furnishes some interesting details respecting the practice of underwriters at that port:

"The premium charged on first class A No. 1 vessels is $7\frac{1}{2}$ per cent. per annum; but underwriters here would refuse to take, at this rate, any American (United States) vessel, because they know that there are few hands on board who are thorough sailors, many of them never having been to sea before, and even their captains very often knowing nothing of seamanship, leaving the whole command in reality to the masters.

"Hamburg masters, as well as mates, have to undergo very strict examination before they are allowed to take command. The same is true of Denmark, Sweden and Prussia; their vessels are consequently considered by Hamburg underwriters just as good risks.

"The premium from Hamburg to New-York and home is, in the summer season, two per cent., and rises in the winter to three and a half per cent. All losses are paid in full; there is no deduction made of total loss. If total loss, the amount insured is paid within two months after the underwriter receives notice of the damage. On the cargo (hulk of the vessel) the adjuster of averages, a sworn city officer, deducts one-third for use, which is taken to be the betterment of the vessel.

"Any average, either particular or general, must rise to three per cent. to be recoverable; but Hamburg underwriters are bound to pay any foreign statement, correct, according to the laws of the port of destination. This is a great advantage to the insured over the English policies, which recognise only the statement made according to their own laws.

"Hamburg laws and customs, as to insurance, are looked upon as the best, and for this reason the greater part of Northern Europe, viz., Holland, Denmark, Sweden, Lubeck, Prussia, and even Russia, have adopted the major part of them, and many parties and companies in these countries sign their policies 'according to the Hamburg customs.' The underwriters of Hamburg sign their policies according to the 'recognised condition of the Hamburg insurances on maritime risks.' * * * * *

"The insurance business done in Hamburg is very considerable; seven hundred and fifty millions of marcs banco are insured annually. Two great advantages to the insured, contained in the Hamburg policies, not to be found in the English, are to be noted: *First*. The former cover the cargo from land to land, while the latter only cover from port to port. *Second*. The Hamburg policies cover losses arising from the negligence

or misdemeanors of the captain and crew, even when the destruction is caused by premeditated malice. Deeming this subject one of very great interest, and it being very desirable that the cause of the higher position held by Hamburg and Northern Europe vessels should be made known, the whole system of management here established for the masters, mates and sailors has been the object of a laborious examination on the part of government commissioners."

POSTAL STATISTICS.

POST OFFICE REVENUE BY STATES, 1859-1860.

We have compiled from authentic sources the following tables, giving interesting facts respecting the postal operations of the government during the last fiscal year ending June 30, 1860 :

<i>Free States.</i>	<i>Letter Postage.</i>	<i>Newspaper Postage.</i>	<i>Total Receipts. to Postmasters.</i>	<i>Compensation.</i>	<i>Total Expenses.</i>	<i>Excess of Expenditures.</i>
Maine,....	\$ 13,678 ..	\$ 13,526 ..	\$ 166,671 ..	\$ 76,858 ..	\$ 199,205 ..	\$ 32,534
N. Hamp.,	8,839 ..	10,663 ..	111,076 ..	54,117 ..	109,411 ..	....
Vermont,.	4,087 ..	12,510 ..	106,772 ..	56,167 ..	128,408 ..	21,635
Mass.,....	75,443 ..	27,489 ..	642,955 ..	184,747 ..	480,829 ..	....
R. Island,.	4,059 ..	3,745 ..	69,057 ..	16,452 ..	43,944 ..	....
Conn.,....	9,731 ..	15,855 ..	207,944 ..	75,992 ..	204,195 ..	....
New-York,	273,451 ..	88,990 ..	1,681,139 ..	337,564 ..	1,170,230 ..	....
N. Jersey,.	15,245 ..	11,223 ..	139,757 ..	59,909 ..	155,304 ..	15,546
Penn.,....	72,870 ..	54,507 ..	708,555 ..	196,400 ..	630,640 ..	....
Michigan,.	14,669 ..	10,123 ..	178,649 ..	75,163 ..	223,023 ..	44,240
Wisconsin,.	18,218 ..	16,788 ..	183,783 ..	33,540 ..	576,017 ..	357,693
Illinois,...	31,457 ..	37,300 ..	445,728 ..	185,725 ..	645,119 ..	199,390
Ohio,.....	34,659 ..	45,059 ..	532,259 ..	188,867 ..	812,729 ..	280,462
Indiana,...	13,091 ..	26,500 ..	218,996 ..	101,194 ..	366,589 ..	149,593
Iowa,.....	9,647 ..	17,368 ..	141,902 ..	65,702 ..	265,690 ..	128,783
California,.	57,993 ..	14,374 ..	286,218 ..	65,903 ..	1,061,161 ..	774,942
Oregon,....	2,702 ..	1,957 ..	15,590 ..	7,337 ..	40,151 ..	24,560
Minnesota,.	5,614 ..	4,539 ..	43,507 ..	20,942 ..	130,140 ..	86,632
Total,...	\$ 660,448	\$ 418,516	\$ 5,879,559	\$ 1,762,321	\$ 7,238,777	\$ 2,109,014

TERRITORIES.

N. Mexico,	\$ 409 ..	\$ 238 ..	\$ 3,359 ..	\$ 1,671 ..	\$ 15,789 ..	\$ 19,148
Utah,.....	1,588 ..	247 ..	4,436 ..	2,238 ..	106,585 ..	102,149
Nebraska,.	787 ..	959 ..	9,741 ..	5,480 ..	43,504 ..	33,763
Wash.,....	1,211 ..	461 ..	5,150 ..	2,792 ..	42,600 ..	37,449
Kansas,...	2,472 ..	2,781 ..	31,073 ..	14,640 ..	78,327 ..	42,253
Total,.....	\$ 6,467 ..	\$ 4,686 ..	\$ 53,759 ..	\$ 26,821 ..	\$ 285,164 ..	\$ 231,408
D. C.,.....	6,252 ..	3,245 ..	51,292 ..	4,025 ..	40,029 ..	....

BORDER SLAVE STATES.

Delaware,.	\$ 1,402 ..	\$ 2,184 ..	\$ 43,130 ..	\$ 9,281 ..	\$ 34,110 ..	....
Maryland,.	22,056 ..	11,492 ..	199,563 ..	36,233 ..	308,699 ..	109,135
Virginia,.	11,454 ..	26,053 ..	275,269 ..	104,517 ..	530,608 ..	255,339
N. C.,....	3,158 ..	12,187 ..	97,812 ..	45,415 ..	226,672 ..	128,859
Kentucky,.	8,044 ..	15,686 ..	166,520 ..	60,614 ..	252,562 ..	196,042
Tenn.,....	5,164 ..	14,689 ..	155,732 ..	52,555 ..	317,006 ..	161,278
Missouri,.	24,525 ..	25,033 ..	253,824 ..	70,326 ..	680,538 ..	426,714
Arkansas,.	2,615 ..	7,675 ..	52,620 ..	26,988 ..	342,428 ..	289,803
Total,....	\$ 78,418	\$ 114,999	\$ 1,149,470	\$ 405,889	\$ 2,802,623	\$ 1,567,170

CONFEDERATE STATES OR GULF SLAVE STATES.

	<i>Letter Postage.</i>	<i>Newspaper Postage.</i>	<i>Total Receipts.</i>	<i>Compensation to Postmasters.</i>	<i>Total Expenses.</i>	<i>Excess of Expenditures.</i>
S. C.,....	\$ 10,714 ..	\$ 8,584 ..	\$ 113,675 ..	\$ 32,419 ..	\$ 245,035 ..	\$ 140,409
Georgia, ..	7,786 ..	18,310 ..	183,120 ..	65,103 ..	348,865 ..	165,744
Florida, ..	1,674 ..	2,555 ..	28,317 ..	14,046 ..	195,536 ..	167,218
Alabama, ..	7,206 ..	14,746 ..	148,471 ..	53,280 ..	430,823 ..	282,351
Miss.,....	4,682 ..	14,100 ..	116,018 ..	52,852 ..	367,922 ..	251,904
Texas, ...	9,567 ..	12,468 ..	128,177 ..	54,687 ..	706,280 ..	578,108
Louisiana,	26,772 ..	15,478 ..	218,323 ..	33,540 ..	576,017 ..	357,693
Total,....	\$ 70,851	\$ 86,236	\$ 936,101	\$ 306,927	\$ 2,879,528	\$ 1,943,422

EXCESS OF RECEIPTS.

New Hampshire,.....	\$ 1,644	Pennsylvania,.....	\$ 77,915
Massachusetts,.....	182,126	Dist. of Columbia,.....	11,262
Rhode Island,.....	25,113	Delaware,.....	14,019
Connecticut,.....	8,748		
New-York,.....	504,908	Total,.....	\$ 820,755

	<i>Free States.</i>	<i>Border Slave.</i>	<i>Gulf Slave.</i>
Letter Postage.....	\$ 660,448	.. \$ 78,418	.. \$ 70,851
Newspaper,	418,516	.. 114,999	.. 86,236
Total receipts,.....	5,879,559	.. 1,149,470	.. 936,101
Compensation to P. M's,.....	1,762,321	.. 405,889	.. 305,927
Total expenses,.....	7,233,777	.. 2,802,623	.. 2,879,923
Excess of expenditures,.....	2,109,014	.. 1,567,170	.. 1,943,422
Excess of receipts,.....	....	.. 14,019	.. ....

REGISTERED LETTERS.

The largest amounts received for registered letters were—From New-York, \$2,947; from Pennsylvania, \$2,240; Ohio, \$1,971; Illinois, \$1,424; Massachusetts, \$1,197; Virginia, \$1,063. These are the only States which paid over one thousand dollars. The whole receipts from this source from the United States was only \$25,038.

STAMPS.

The principal receipts are as follows:

New-York,.....	\$ 1,315,750	Ohio,.....	\$ 450,069
Pennsylvania,	578,756	Illinois,.....	375,546
Massachusetts,.....	538,824		
		Total receipts for the United States.....	\$ 6,698,006

THE NEW-YORK POST OFFICE—UP-TOWN STATIONS.

Seven outside offices, or "stations," are now attached to our city post office. These stations are all established under the authority of the government, and at each of them the letters are received and sent seven times each day to the general post office. The following is a complete list of these sub-offices:

- Station "A," 129 Spring-street.
- Station "B," 439 Grand-street.
- Station "C," corner of Troy and Fourth streets.
- Station "D," 12 Bible House, Eighth-street.
- Station "E," 368 Eighth Avenue.
- Station "F," 408 Third Avenue.
- Station "G," 1,259 Broadway.

At each station stamps and stamped envelopes can be obtained, as well as all information in regard to postal matters.

FOREIGN CORRESPONDENCE

OF THE MERCHANTS' MAGAZINE AND COMMERCIAL REVIEW.

I. IMPORTS AND EXPORTS OF GREAT BRITAIN. II. PROPORTION OF THE AMERICAN TRADE TO THE WHOLE. III. RATE OF INTEREST. IV. FINANCES OF ENGLAND. V. MANCHESTER CHAMBER OF COMMERCE AND THE CULTIVATION OF COTTON. VI. GENERAL BANKRUPT LAW IN ENGLAND. VII. FRAUDULENT TRADE MARKS. VIII. EXTENSION OF ADMIRALTY COURT JURISDICTION.

LONDON, *March 16th*, 1861.

THE rate of interest still rules very high, and we have the prospects of much renewed discussion on the bank charter, and its effects on the issue of notes and general accommodation. Proposals are already coming forward for providing for the increased exigencies of trade, either by enlarging the power of issue of the bank, say to £20,000,000, instead of £14,000,000, without gold, or by creating some kind of inconvertible currency on the deposit of Consols, say to the extent of twice the amount. As this subject is likely to interest you, I will be glad to give you every information on the various schemes proposed.

The finances of this country are not in a satisfactory condition. The expenditure continues very large, and the revenue will show some deficiency both in the customs and excise, especially in spirits, cigars, &c. The condition of the working classes has not been so good this year, partly in consequence of the bad harvest, and partly by reason of the severe winter and of the state of politics. As inquiry is about to be instituted on the mode of assessing the income tax, with a view to the removal of some of its worst features. All kinds of income at present pay the same. A person receiving £100 from the government funds, a person gaining £100 in the shape of salary for services, and a person receiving £100 from annuities, or from profits of trade, or rent of houses, all pay the same, though there is a great difference in the value of these different incomes.

The Chamber of Commerce of Manchester is seriously engaged in promoting the cultivation of cotton in India and an association has been formed in that town, besides the Cotton Supply Association. The aims of this new association are to invest capital in India, in the cultivation of cotton under European superintendence. The hope is moreover entertained, that the Indian government may be enabled to complete the many canals and railways which have been projected, and so diminish materially the cost of bringing cotton from the interior to the seaports. The Leeds and Bradford Chambers of Commerce are also intent upon the extension of cultivation of wool and alpaca in different colonies.

The monthly accounts of the Board of Trade for the year 1860 have been published, and they contain information of interest. The trade of the United Kingdom in the last three years has been as follows:

<i>Years.</i>	<i>Imports.</i>	<i>Exports.</i>	<i>Imports and Exports.</i>
1858,.....	£ 183,329,595 ..	£ 116,606,756 ..	£ 249,938,351
1859,.....	143,054,958 ..	130,411,529 ..	273,466,487
1860,.....	169,181,063 ..	135,842,817 ..	304,978,880

Our exports to the American States in the three years have been as follows :

	1858.	1859.	1860.
United States of America,...	£ 14,491,468 ..	£ 22,553,405 ..	£ 21,613,111
Mexico,	411,831 ..	597,899 ..	462,629
Central America,.....	393,179 ..	226,720 ..	182,186
New-Granada,.....	505,749 ..	729,468 ..	810,870
Venezuela,.....	316,738 ..	317,716 ..	323,663
Ecuador,.....	26,963 ..	22,261 ..	74,139
Brazil,.....	3,984,817 ..	3,685,718 ..	4,444,513
Uruguay,.....	522,670 ..	693,622 ..	922,367
Buenos Ayres,.....	1,008,819 ..	958,677 ..	1,782,399
Chili,.....	1,117,580 ..	1,474,606 ..	1,703,783
Peru,	1,163,165 ..	857,568 ..	1,381,944
	<hr/> £ 23,942,949 ..	<hr/> £ 32,117,660 ..	<hr/> £ 33,701,608

The proportion which our American trade bears to the whole is as follows :

	1858.	1859.	1860.
Total exports,.....	£ 116,608,756 ..	£ 130,411,529 ..	£ 135,842,817
Exports to foreign countries, ..	76,386,299 ..	84,267,533 ..	92,170,560
Exports to America,.....	23,742,949 ..	32,117,660 ..	33,701,608
Exports to the United States, ..	14,491,448 ..	22,553,605 ..	21,613,111

The computed real value of the imports can only be given a month after the publication of the quantities, but an estimate may be made for the year from the amount for the eleven months, ended November 30th, which was £144,887,078, against £122,538,694 in the corresponding eleven months of 1859. The total for the year must be about one hundred and fifty-sixty millions sterling. The annexed table shows the extent to which the principal imports have participated in the aggregate increase :

	1858.	1859.	1860.
Cocoa,.....lbs.	10,338,404 ..	6,006,759 ..	9,009,839
Coffee,	60,697,265 ..	65,353,030 ..	82,767,746
Corn, wheat,.....qrs.	4,241,719 ..	4,000,922 ..	5,880,958
Cotton, raw,.....cwts.	9,235,198 ..	10,946,331 ..	12,419,096
Flax,.....	1,283,905 ..	1,432,037 ..	1,464,810
Hemp and Jute,.....	1,638,360 ..	2,159,980 ..	1,609,175
Hides, untanned,.....	728,288 ..	866,687 ..	848,328
Oil, palm,.....	778,230 ..	685,794 ..	804,326
Rice,.....	3,692,023 ..	1,450,092 ..	1,534,167
Silk, raw,.....lbs.	6,277,576 ..	9,920,891 ..	9,178,647
Sugar, unrefined,.....cwts.	9,010,796 ..	9,098,564 ..	8,807,586
Tallow,.....	1,235,789 ..	1,074,336 ..	1,430,108
Tea,.....lbs.	75,432,535 ..	75,077,451 ..	88,946,532
Tobacco,.....	62,216,705 ..	50,671,265 ..	51,670,893
Wine,.....galls.	5,791,636 ..	8,195,518 ..	12,483,362
Wool,.....lbs.	126,738,723 ..	133,384,634 ..	145,396,577

In the present aspect of affairs across the Atlantic, the quantities of raw cotton supplied to this country from the various sources of supply constitute a subject of much importance. We hear every day of the capabilities of this or that country for producing an illimitable supply of this essential raw material, and sometimes of actual samples submitted by experimental growers to the judgment of Manchester manufacturers; but, in the meantime, what is the state of the case at present, as disclosed by the import returns? We find that out of the total cotton imports of

last year, 9,963,309 cwts., or nearly five-sixths of the whole, came from the United States, 1,822,689 cwts. from India, 392,447 cwts. from Egypt, 154,347 cwts. from Brazil, and the remainder, 86,304 cwts., from "other countries," the last figures showing, therefore, the whole quantity that we have been able to obtain from the Levant, Africa, the West Indies, and Central America, during twelve months.

The exports of Great Britain for the year amounted in value to £135,842,817, against £130,411,529 in the preceding year, and £116,608,756 in 1858, these amounts being exclusive of the foreign and colonial produce exported. All our principal manufactures have participated in this increase of trade, as will be seen from the following table :

	1858.	1859.	1860.
Apparel and slops,.....	£ 1,944,283	£ 2,183,331	£ 2,156,348
Beer and ale,.....	1,851,796	2,116,373	1,863,998
Coal and culm,.....	3,052,753	3,270,013	3,321,539
Cotton manufactures,.....	33,402,264	38,744,113	42,148,409
" yarn,.....	9,573,320	9,458,112	9,875,073
Earthenware and porcelain,....	1,150,607	1,313,831	1,440,998
Haberdashery and millinery,....	3,473,541	4,290,032	4,001,277
Hardwares and cutlery,.....	3,280,466	3,809,255	3,772,025
Leather manufactures,.....	1,688,257	1,657,611	1,725,861
Linen manufactures,.....	4,134,126	4,604,587	4,802,203
Linen yarn,.....	1,739,190	1,674,602	1,800,927
Machinery,.....	3,603,989	3,731,301	3,825,361
Metals—pig iron,.....	1,101,118	901,929	974,260
Bar iron,.....	2,082,548	2,373,910	2,385,956
Railway iron,.....	3,568,314	4,124,208	3,414,335
Cast iron,.....	820,924	795,819	833,277
Wrought iron,.....	2,864,916	3,084,720	3,314,459
Steel,.....	589,781	805,832	906,321
Unwrought copper,.....	696,523	691,627	749,067
Copper, yel. metal sheets, &c.,	1,620,447	1,504,442	1,803,592
Wrought copper and brass,...	537,159	405,236	449,353
Lead,.....	459,656	480,845	541,347
Tin,.....	270,580	353,109	363,469
Tin plates,.....	1,351,193	1,522,618	1,498,681
Salt,.....	287,545	253,922	358,090
Silk manufactures,.....	1,304,945	1,562,152	1,577,001
Silk thrown, silk twist and yarn,	791,646	791,560	824,291
Wool,.....	901,495	640,989	865,781
Woolen manufactures,.....	9,777,977	12,053,708	12,163,861
Woolen yarns,.....	2,953,850	3,084,061	3,843,396

Of the total value of British produce and manufactures exported during the year, £43,672,257 represents the exports to British possessions, against £46,163,296 in the preceding year, and £60,222,457 in 1858; and £92,170,560, the exports to foreign countries, against £84,267,533 in 1859, and £76,386,299 in 1858. The United States were our best customer, taking goods to the value of more than twenty-one and a half millions; then comes India, nearly seventeen millions; and the Hanse Towns hold the third place, taking more than ten and a quarter millions.

The present session of the British parliament is likely to be productive of many useful measures of a commercial and economical character. The attention of the legislature is not likely to be disturbed this year by a state of war in any country, nor by a futile attempt at parliamentary reform. We are to have a year of practical work, and we expect the most satisfactory results.

The first measure the legislature has undertaken is the reform of the bankruptcy law, the state of which has for a considerable time given cause to much complaint. Year after year have measures been introduced on the subject which have received but meagre support, but the attorney-general's bill of this session is universally approved of. The principal objects aimed at by this measure are the amalgamation of bankruptcy and insolvency, and the application of the bankruptcy law to traders and non-traders alike; the creation of a chief judge of bankruptcy, and the constitution of that judge a court of appeal from the commissioners, great facilities for the settlement of bankruptcies by arrangements among creditors after adjudication, and even out of court by trust-deeds between the debtor and his creditors, provided there be the assent of three-fourths of the creditors of £10 and upwards respectively. Provisions are also made for liberating prisoners for debt, by allowing them to petition in *forma pauperis* for adjudication in bankruptcy. It would be important to introduce, in such measures, provisions for the protection of foreign creditors as regards notices, &c. With the immense increase of commerce, we may anticipate that a much larger number of foreign creditors may be interested in British bankruptcies, and *vice versa* of British creditors in foreign bankruptcies. It becomes, therefore, important for the boards of trade and chambers of commerce of different countries carefully to watch the progress of legislation in other States.

Another important measure is the bill to amend the law relating to the fraudulent marking of merchandise; the frequent counterfeit of such marks in this and other countries having proved a source of great loss to manufacturers. It is proposed by the bill to constitute the forging or imitating a trade mark, and the selling of goods with forged trade marks, with intent to defraud, a misdemeanor. Also the marking with false indication of quantity, and the selling of goods with false indication of quantity, with intent to defraud, a misdemeanor; and also the forging, imitating or falsely applying the names and marks of artists, with intent to defraud, a misdemeanor. A similar legislation exists in most States of Europe and America. But in France, Austria and other European countries, a registration of trade marks is established by law, in order to secure the right of property in the same. The British government is unwilling to adopt such a course, but I conceive it very necessary in order to avoid the necessity in each case to prove a right of property in the mark. Foreign merchants and manufacturers will, of course, participate in the same protection, and the British government will endeavor to establish reciprocity treaties on the subject with foreign powers.

Another bill has been introduced for establishing equitable councils of conciliation to settle differences between masters and operatives. Such councils to be of not less than two masters and two operatives, and of not more than ten of each. A bill is also before the House to extend the jurisdiction of the Court of Admiralty; and one to afford facilities for the better ascertainment of the law of foreign countries when pleaded in courts within Her Majesty's dominions, by giving power to superior courts to remit a case with queries to any foreign State with which Her Majesty may have made a convention for that purpose for ascertaining the law of such State.

NEW COMMERCIAL ACTS AND REGULATIONS.

I. DUTIES ON IMPORTS AND TONNAGE.

The Act to amend the provisions of the 56th section of the Act to Regulate the Collection of Duties on Imports and Tonnage, approved March 2d, 1799.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That whenever any goods, wares or merchandise shall be imported into any port of the United States from any foreign port, in any ship or vessel, at the expiration of eight working days, if the ship or vessel shall be less than three hundred tons burden, and within twelve working days, if it be of three hundred tons burden and less than eight hundred, and within fifteen days, if it be of eight hundred tons burden and upwards, after the time within which the report of the master or person having charge or command of any ship or vessel is required to be made to the collector of the district, if there shall be found any goods, wares or merchandise, other than shall have been reported for some other district, or some foreign port or place, the collector shall take possession thereof; but with the consent of the owner or consignee of any goods, wares or merchandise, or with the consent of the owner or master of the vessel in which the same may be imported, the said goods, wares or merchandise may be taken possession of by the collector, after one day's notice to the collector of the district.

Approved March 2, 1861.

TREASURY DEPARTMENT, *March 15, 1861.*

The following acts of Congress, approved March 2d, 1861, are published for the information and government of officers of the customs and others concerned.

All invoices claiming to be made out in the new silver florin of Austria must be accompanied in each case by a consular certificate showing that fact.

S. P. CHASE, *Secretary of the Treasury.*

II. THE FLORIN.

An Act declaring the value of the new silver Florin of Austria.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the new silver florin of Austria shall, in all computations at the custom-house, be estimated at forty-six cents and nineteen hundredths of a cent.

Approved March 2d, 1861.

DEPARTMENT OF STATE, *Washington, March 14, 1861.*

I do hereby certify that the within is a true and correct copy of the original on file in this department.

W. HUNTER, *Chief Clerk.*

III. CIRCULAR INSTRUCTIONS TO COLLECTORS AND OTHER OFFICERS OF THE CUSTOMS.

TREASURY DEPARTMENT, *March 21, 1861.*

As numerous inquiries have been made respecting the tariff act of 1861, it is deemed proper to state, for the information and government of officers of the customs and others concerned, the views entertained by this department on several of its provisions.

All questions of liability to duty or of exemption therefrom of merchandise imported under the provisions of the new tariff, and questions as to the rates of duty thereon, will be determined in accordance with the provisions of the fifth section of the tariff act of 1857, which section will, in the opinion of this department, still remain in force on and after the first proximo unrepealed and unmodified.

The clause in the tariff act of 1861, repealing such of existing laws as are repugnant to its provisions, does not change or modify the warehouse or appraisement laws and regulations now in force except in one particular, which is, that in cases where a bill of lading is presented showing the day of actual shipment, certified to by a consular officer of the United States, such date—in lieu of the “period of exportation” prescribed by existing laws—shall be the date at which the foreign market value of the merchandise shall be estimated and ascertained by the appraisers in order to the assessment of *ad valorem* duties.*

All merchandise actually on shipboard and bound to the United States on or before the 17th instant, whether arriving before or after the first day of April next, and all merchandise whensoever shipped which may be actually on board of vessels in port that have been regularly entered at the custom-house on or before the first day of April aforesaid, may be entered for consumption or warehousing at the rates of duty now existing, or, if the rates of duty on the merchandise are lessened by the tariff of 1861, it may be entered at such lesser rates. The same privilege will be extended to all merchandise in public store, unclaimed on the first proximo, when entered for warehousing or consumption in pursuance of law; and all merchandise in warehouse under bond on the first proximo will be entitled to entry for withdrawal at rates of duty now existing, or, if the rates of duty on the merchandise are lessened by the tariff of 1861, the entry thereof may, at the option of the importer or owner, be made at the lesser rates.

In allowances on account of tare, draft, &c., on goods subject to specific duty under the new tariff, officers of the customs will be governed by the provisions of the 58th and 59th sections of the General Collection Act of March 2d, 1799, which are again brought into operation.

S. P. CHASE, *Secretary of the Treasury.*

IMPORTANT TREASURY INSTRUCTIONS.

The following Treasury instructions will be of interest to merchants trading with the States of the Southern Confederacy :

TREASURY DEPARTMENT, *April 1, 1861.*

SIR,—Referring you to the department letter of the 30th ult., directing that no further entries of merchandise for transportation in bond can

be allowed relative to shipments to the ports of South Carolina, Georgia, Alabama, Mississippi, Louisiana, Florida and Texas, I have now to inform you that transportation bonds for merchandise to the ports referred to will be cancelled on the payment of duties at your office in cases where the party shall satisfy you by his affidavit, to be filed with his bond, that the merchandise arrived at the port of destination, and that it was found impracticable, by reason of the existing condition of affairs in those ports, to obtain the requisite cancelling certificate.

Very respectfully, your obedient servant,

S. P. CHASE.

AUG. SCHELL, Esq., Collector, &c., New-York.

THE NEW TARIFF FURTHER EXPLAINED.

The literature of the new tariff is rapidly increasing. In addition to the explanations and interpretations that have already been published, Collector SCHELL yesterday issued the following order to the clerks of the New-York Custom-House. It specifies certain rules and regulations which will hereafter be enforced :

ORDER.

Custom-House, New-York, April 1, 1861.

To the Entry and Amendment Clerks :

Under the tariff which goes into effect from and after this day, the specific duties will be made up by the entry clerks, in every case where it is practicable, upon the invoice quantity or measurements, subject to re-adjustment on receipt of the proper returns.

In cases where the duty cannot be made up from the invoice, a deposit will be taken sufficient to cover the duty, the estimate of which to be checked in the naval office. The accompanying list will serve as a guide to the entry clerks in estimating the amounts to be received as deposits on certain articles.

In cases where articles are subject to rates of duty varying according to the return of measurement, the highest rate (as was the practice under the former tariff) will be assessed in the first instance, to be subsequently reduced on liquidation, should the returns, when received, warrant such reduction. Under this rule, 30 per cent. *ad valorem* will be the estimated charge on all linens and silks.

In all cases, whether the duties are *ad valorem*, specific or secured by deposits, the invoice values will be reduced by the entry clerks to United States currency.

The invoice amount will be written in full on the invoice (as formerly) in all cases, with the rate of duty *ad valorem* or specific.

No amended duties will hereafter be made, but the original entry will be amended, (in red ink,) and in cases where a further sum of duty is due, immediate payment will be required.

The same rules will apply to entries for warehousing. When goods are withdrawn at a less rate of duty, by virtue of the provisions of the new tariff, the difference of duty will be noted on the entry and endorsed on the bond, to balance the amount originally assessed.

AUGUSTUS SCHELL, Collector.

IMPORTANT TREASURY CIRCULAR.

No Transportation in Bond to Southern Ports.

Collector SCHELL received the following important circular from the Treasury Department :

TREASURY DEPARTMENT, *March 30, 1861.*

SIR,—The control of the warehouses of the government in the several ports of the States of South Carolina, Georgia, Alabama, Mississippi, Louisiana, Florida and Texas having been usurped under the alleged authority of those States, and the officers of the customs, acting under the authority of the United States, having been forcibly excluded from their proper functions in the custody of merchandise and superintendence of the entries for warehousing and withdrawal, it has become impracticable to continue the privilege of bonding for transportation to those ports.

Collectors of the customs are accordingly hereby instructed that no entries for transportation in bond to those ports can be permitted until otherwise directed by this department.

Very respectfully, your obedient servant,

S. P. CHASE, *Secretary of the Treasury.*

A. SCHELL, Esq., *Collector of Customs, New-York.*

RATES OF DEPOSIT.

The following schedule has been prepared for the use of clerks in determining the proper deposits on merchandise entered for consumption. Average duty to be calculated for deposition the following articles, viz. :

Unbleached cottons,.....	average, 45 per cent.
Bleached cottons,.....	" 45 "
Colored or printed cottons,.....	" 50 "
Cotton quiltings,	" 30 "
Carpetings, ingrain and Dutch,.....	" 30 "
" felt,	" 40 "
" other,	" 35 "
Hearth-rugs or door-mats, (wool,).....	" 35 "
Blankets,	" 40 "
Wool shawls,	" 40 "
Woollen cloths, (fine,).....	" 35 "
" coatings, viz., beaver, castor,	" 40 "
Cloth, (wool and cotton,)	" 40 "
Wool, average 18½ to 24 cents per lb.,.....	" 15 "
" 24½ to \$1 00 per lb.,.....	" 30 "
Linens, piece goods, duty to be closed up, ..	" 30 "
Silks,	" 30 "
Silk velvets,	" 30 "
Wearing apparel, (wool,)	" 50 "
Segars, from \$2 to \$5 per M.,	" 80 "
" above \$5 and not above \$10 per M., ..	" 60 "
" over \$10 per M.,	" 42 "
Brandy,.....	average on 3d proof, \$1 16 per gallon.
Gin,	2d " 0 43 "
Kirschenwasser, &c., ..	3d " 0 58 "
Rum or spirits,	3d " 0 46 "

AUGUSTUS SCHELL, *Collector.*

Custom-House, New-York, April 1, 1861.

The New Tariff.—The following instructions have been received from the Secretary of the Treasury :

TREASURY DEPARTMENT, April 1, 1861.

SIR,—Referring you to the department's letter of the 30th ult., directing that no further entries of merchandise for transportation in bond can be allowed relative to shipments to the ports of South Carolina, Georgia, Alabama, Mississippi, Louisiana, Florida and Texas, I have now to instruct you that transportation bonds for merchandise to the ports referred to will be cancelled on the payment of duties at your office, in cases where the party shall satisfy you by his affidavit, to be filed with his bond, that the merchandise arrived at the port of destination, and that it was found impracticable, by reason of the existing condition of the affairs in those ports, to obtain the requisite cancelling certificate.

Very respectfully, your obedient servant,

S. P. CHASE, *Secretary of the Treasury.*

AUGUSTUS SCHELL, Esq., *Collector, &c., New-York.*

PUBLIC RESOLUTION IN CONGRESS—No. 4.

Joint Resolution, giving the assent of Congress to certain acts passed, or to be passed, by the Legislatures of the States of Arkansas, Louisiana and Texas, or any two of them, in relation to the "Raft" of Red River, and for other purposes.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the assent of Congress be and the same is hereby given to any acts that have been or may be passed by the Legislatures of the States of Arkansas, Louisiana and Texas, or of any two of them, having for their object the improvement of the navigation of Red River, by the removal of the "raft" therefrom.

SECTION 2. *And be it further resolved,* That Congress hereby assents after and so soon as any company incorporated by the States aforesaid, or any two of them, for the purpose, shall have removed the obstructions to navigation in Red River caused by the "raft," and have rendered the same navigable, and not before, the said States, or any two of them, may, through the said company, under and in accordance with, and in the mode provided by the acts incorporating the same, for the benefit of the company and to reimburse to it its expenditures in removing said "raft," levy and collect, by way of commutation for duties of tonnage, tolls upon all boats or other water crafts ascending or descending said river, and passing through the portion thereof that shall so have been improved and rendered navigable, not to exceed the following sums; that is to say, fifty cents on and for each bale of cotton, and twenty-five cents on and for each barrel of goods, wares and merchandise wherewith such boats or crafts may be laden; and that this privilege may continue until the expiration of thirty years from the ninth day of March, Anno Domini eighteen hundred and sixty: *Provided,* That nothing herein contained shall authorize the said company to impair the navigation of Red Bayou: *Provided further,* That the United States shall have the right, at any time after the expiration of ten years, to take possession of the work by paying to the company the amount of expenditure, with seven per centum interest.

Approved, February 21, 1861.

MERCANTILE MISCELLANIES.

NEW SILK WORMS.

It is gratifying to record the honors bestowed upon those efforts which are needful in adding to the wants of industry throughout the world.

M. DE MONTIGNY, who introduced into France the oak of Mantchouria, on the leaves of which silkworms feed, and also the ignaure, sorgho and bamboo, is to receive a medal of honor from the Society of Acclimation. On one side of the medal is to be the profile of M. DE MONTIGNY, and on the other an appropriate inscription, surrounded with a wreath of leaves of the oak and the plants brought to France by him.

STEAM ON THE WELLAND CANAL.

About 3,500 sailing vessels—chiefly American—passed through it last year, and \$120,000 were paid for towage, which is by old-fashioned horse-power. Of course, the employment of horse-power is attended with many inconveniences. Sometimes a change of wind, from foul to fair, will bring a hundred or a hundred and fifty sail into Port Colborne, Lake Erie, and a delay of five or six days ensues before they can all get horses to tow them into Lake Ontario. In addition to this, those who have the horses exact excessive sums from anxious captains on such occasions, and a serious tax on shipping is the result. Moreover, the horses are owned mostly by tavern-keepers, who profit by every delay. Trade has suffered from these vexations too long, and a remedy is now sought.

The Commissioner of Public Works, Hon. Mr. ROSE, is about to advertise immediately for tenders for towing on the canal by steam. The tugs required are small screws, such as are owned on the American shores of the lakes. The rates for towing are not to be much reduced, but it is estimated that the profit to the shipping interest will be great, as the delays in finding towage will be avoided, the passage through the canal shortened by several hours, and vessels thus enabled to make one or two more in the season.

AMERICAN SEA OFFICERS IN GREAT BRITAIN.

The Hon. Mr. LINDSAY, in his address last year before the Chamber of Commerce, alluded to the fact that foreign vessels can be purchased and registered in England. It appears, now, that not only the American vessels, but their officers, are to be registered in Great Britain. Since, we learn from the London *Mercantile and Shipping Gazette*, that several American captains had passed the Board of Trade examinations, in order to command their ships under the British flag; that is, to obtain the requisite certificates of competency. According to English law, however, other qualifications are said to be necessary; they must also be naturalized; but we understand that the statute relating to this subject is so

loosely worded, that this requirement may be set aside or explained in a liberal sense to meet the American exigency. This is a summary mode of insuring the efficiency of the British marine. It is a high compliment, not only to the superiority of our vessels, but to the skill of our officers, which are required to bring out the good qualities of ships. It was remarked, when the yacht AMERICA passed by sale into British hands, that her performances were less satisfactory than when under the control of American seamen.

QUICK VOYAGE.

The bark REINDEER, of New-Haven, Capt. A. S. LANFARE, sailed from New-York 17th January, for Barbadoes, with 86 head of horses and mules on deck. Arrived at Barbadoes in nine days, discharged her inboard cargo, took in ballast, and proceeded to Port Spain, Trinidad, and landed the deck load. Sailed from thence 2d February, and arrived back to New-York 20th; thus making the round voyage in thirty-three days, counting the day of sailing and arriving as one day.

FOREIGN COMMERCE OF NEW-YORK.

Hitherto New-Orleans has occupied a prominent position in the foreign export trade of the country. We find that, for the fiscal year ending June 30th, 1860, of the exports New-York reports over \$145,000,000 out of \$400,000,000 in the aggregate, or thirty-six per cent.; while of the imports, amounting to \$362,000,000 for the whole country, New-York reports \$248,000,000, or a fraction over two-thirds, and of the aggregate movement New-York has one-half of the whole United States. The general results are as follows :

IMPORTS

New-York,.....	\$ 248,489,877
All other States,.....	113,676,377
Total for the year ending July 1st. 1860.....	\$ 362,166,254

EXPORTS

New-York,.....	\$ 145,555,449
All other States,.....	254,566,847
Total exports for 1859-1860.....	\$ 400,122,296

New-York presents the following extraordinary results:

Exports by American vessels, domestic produce,.....	\$ 76,268,788
“ “ foreign “ “	49,797,179
Total domestic produce,.....	\$ 126,069,967
Total foreign produce,.....	19,494,482
Total for the year 1859-1860,.....	\$ 145,564,449

Next to New-York, Louisiana claims the largest export, being the depot of the vast produce of Illinois, Missouri, Kentucky, Tennessee and other portions of the Mississippi Valley.

TRADE OF THE STATES.

The following table shows the States mostly interested in commerce, and the amount of their individual trade :

STATES.	Fiscal year 1859-1860.			1858-1859.		1857-1858.	
	Imports.	Exports.	Total.	Total.	Total.	Total.	Total.
New-York,.....	\$ 243,489,000	\$ 145,555,000	\$ 389,044,000	.. \$ 346,731,000	..	\$ 296,516,000	..
Massachusetts,....	41,187,000	17,008,000	58,195,000	..	61,843,000	..	64,775,000
Louisiana,.....	32,922,000	108,417,000	131,339,000	..	190,016,000	..	107,468,000
Alabama,.....	1,060,000	83,670,000	89,730,000	..	29,731,000	..	21,029,000
South Carolina,...	1,508,000	21,905,000	23,774,000	..	19,411,000	..	13,996,000
Georgia,.....	782,000	18,483,000	19,265,000	..	16,186,000	..	10,009,000
Maryland,.....	9,784,000	9,001,000	18,785,000	..	16,950,000	..	19,373,000
Pennsylvania,.....	14,684,000	5,628,000	20,262,000	..	19,395,000	..	18,923,000
Virginia,.....	1,328,000	5,853,000	7,184,000	..	7,883,000	..	8,354,000
California,.....	9,580,000	10,296,000	12,876,000	..	27,082,000	..	24,029,000
Total ten States,..	\$ 351,323,000	\$ 390,126,000	\$ 731,489,000	..	\$ 667,163,000	..	\$ 580,373,000
All others,.....	10,843,000	20,006,000	30,849,000	..	23,894,000	..	28,885,000
Totals,.....	\$ 362,166,000	\$ 400,122,000	\$ 762,288,000	..	\$ 695,557,000	..	\$ 607,257,000

WOOL TRADE OF GREAT BRITAIN.

Official Accounts of the Board of Trade relating to Wool, &c., for the years 1858, 1859 and 1860.

IMPORTS OF WOOL, &C., INTO THE UNITED KINGDOM.

Articles.	Importations.		
	1858.	1859.	1860.
Wool, sheep and lambs' :			
From Hanse Towns and other parts of Europe,..... lbs.	28,624,819	.. 39,291,190	.. 38,840,961
British Possessions in South Africa, ..	16,597,504	.. 14,269,348	.. 16,574,345
British East Indies,.....	17,833,507	.. 14,863,403	.. 20,214,173
Australia,.....	51,104,560	.. 53,700,481	.. 59,165,939
Other countries,.....	10,390,200	.. 9,158,593	.. 10,706,233
Total,.....	124,050,590	130,783,000	145,501,651
Wool, Alpaca and the Llama tribe, lbs.	2,688,133	.. 2,501,634	.. 2,894,926
Woollen manufactures :			
Manufactures not made up, value,.....	£ 817,112	.. £ 865,673	.. £ 918,927
Articles wholly or partially made up :			
Shawls, scarfs and handkerchiefs, lbs.	16,422	.. 146,886	.. 446,170

EXPORTS OF FOREIGN AND COLONIAL WOOL, &C., FROM THE UNITED KINGDOM.

Wool, sheep and lambs', produce of British Possessions abroad :	Exportations.		
To Hanse Towns,..... lbs.	517,612	.. 432,312	.. 1,349,770
Belgium,.....	8,372,725	.. 6,229,878	.. 6,829,936
France,.....	11,137,539	.. 11,876,796	.. 15,125,629
Other countries,.....	2,049,029	.. 2,077,292	.. 2,548,706
Totals,.....	22,076,905	20,616,278	25,854,041

Wolvering: ,	1853.	1853.	1853.
To Hanse Towns, lbs.	268,669 ..	868,983 ..	434,597
Belgium,	1,493,011 ..	1,641,173 ..	1,247,328
France,	519,110 ..	337,804 ..	594,327
Other countries,	2,229,731 ..	5,365,742 ..	2,506,410
Total, lbs.	4,510,521 ..	8,213,702 ..	4,782,662
Total of sheep and lambs' wool, ..	26,587,426 ..	28,829,990 ..	30,636,703
Wool, Alpacca and the Llama tribe, lbs.	114,116 ..	276,770 ..	251,640
Woollen manufactures not made up, value,	£22,982 ..	20,044 ..	26,130

EXPORTS OF BRITISH AND IRISH WOOL, WOOLLENS, &C., FROM THE UNITED KINGDOM.

Wool, sheep and lambs':

To Belgium, lbs.	1,126,947 ..	820,830 ..	653,738
France,	10,789,541 ..	6,170,228 ..	8,124,147
Other countries,	1,529,381 ..	2,063,093 ..	2,895,959
Total, lbs.	13,445,869	9,054,151	11,673,844

Woollens—Cloths of all kinds, Duffels and Kerseymeres:

To United States, pieces,	129,883 ..	143,089 ..	136,006
Brazil,	57,656 ..	33,599 ..	33,584
Buenos Ayres,	25,692 ..	24,729 ..	40,164
Chili,	18,043 ..	18,450 ..	19,346
Peru,	29,713 ..	22,524 ..	23,497
China and Hong Kong,	51,767 ..	79,262 ..	80,367
British North America,	25,845 ..	34,841 ..	41,136
British East Indies,	78,556 ..	68,059 ..	44,505
Australia,	31,339 ..	22,923 ..	22,593
Other countries,	115,844 ..	126,764 ..	137,933
Total, pieces,	564,338 ..	574,240 ..	579,135

Mixed stuffs, flannels, blankets and carpets:

To Hanse Towns, yds.	4,748,613 ..	4,441,269 ..	4,241,342
France,	3,896,902 ..	3,187,283 ..	3,331,532
Naples and Sicily,	1,697,856 ..	1,141,232 ..	1,320,739
United States,	38,461,180 ..	55,607,009 ..	52,537,607
Brazil,	1,189,073 ..	884,406 ..	1,260,149
British North America,	2,636,774 ..	3,497,567 ..	4,228,859
British East Indies,	2,114,935 ..	1,866,603 ..	1,033,788
Australia,	4,905,560 ..	5,380,796 ..	3,546,044
Other countries,	16,962,163 ..	17,349,092 ..	21,579,524
Total, yds.	76,603,056	93,355,257	93,079,584

Stockings, doz. pairs,	135,314 ..	281,607 ..	272,332
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Worsted stuffs:

To Hanse Towns, pieces,	555,729 ..	561,621 ..	556,026
Holland,	168,470 ..	152,940 ..	171,721
Belgium,	139,370 ..	110,041 ..	79,564
United States,	460,247 ..	813,150 ..	785,168
China and Hong Kong,	75,683 ..	142,838 ..	197,979
British North America,	113,702 ..	146,224 ..	131,936
British East Indies,	78,094 ..	59,141 ..	44,168
Australia,	128,615 ..	148,945 ..	92,816
Other countries,	630,404 ..	587,041 ..	557,378
Total, pieces,	2,350,314 ..	2,721,941 ..	2,616,756

	1858.	1859.	1860.
Woollen and worsted yarn :			
To Russia,.....cwt.	17,895 ..	18,512 ..	20,390
Hanover,.....	21,660 ..	10,344 ..	13,485
Hanse Towns,.....	104,298 ..	89,459 ..	123,703
Holland,.....	40,580 ..	47,305 ..	54,763
Belgium,.....	11,802 ..	12,338 ..	14,460
France,.....	9,972 ..	7,432 ..	9,865
Other countries,.....	7,727 ..	8,622 ..	9,178
Total,.....cwt.	218,929 ..	204,012 ..	245,839

COMMERCIAL REGULATIONS.

THE TURKISH TARIFF.

THE *London Times* remarks, that the treaties which the Porte has just concluded with England and France are such as we are not likely to obtain for years from the democratic government of the Western world or the model empire of Russia. These treaties, it is understood, are perfectly identical, and when they are once in force with the two Western powers, they will, no doubt, be speedily extended to other nations. The principal stipulation is, that one uniform *ad valorem* duty of eight per cent. on both imports and exports is to be temporarily substituted for those now existing. The present system is, perhaps, one of the most singular that ever was devised by man. Every one, by the laws of the Turkish empire, may trade at an advantage with Turkey, if the code of protection be true, for the foreigner is protected against the native in the most complete manner. The simple manner of the Ottoman financiers for raising money by customs has been to place a 5 per cent. duty on imports and a 12 per cent. duty on exports, both levied *ad valorem*. This system has, under various modifications, been in force for a great number of years, and has actually been incorporated into several commercial treaties with foreign States within the last twenty years. The consequences has been to lessen the little export trade which the empire possessed. The exports in corn, figs and other produce have been hampered by this absurd impost, so that the English, French and German manufactures, required by all classes, have been paid for in money to an extent which has seriously deranged the finances of the country. That, in spite of all of these hindrances, the trade of the empire should have so much increased of late years is a proof of its immense resources, and gives reason to hope that the adoption of a better system will be followed by a new period of prosperity. The 8 per cent. is now, as we have said, to be levied on imports and exports, but only the duty on imports is to be permanent. That on exports is to be diminished 1 per cent. yearly until it is reduced to 1 per cent., and at that amount it is to remain during the twenty-eight years that the treaty lasts. No diminution of the 8 per cent. import duty is to take place. The duty of 3 per cent., levied upon goods imported into Turkey for despatch into other countries, is to be reduced to 2 per cent. henceforth, and to a fixed and definite rate of 1 per cent. at the end of the eighth year. Two articles are excepted from the provisions of this

treaty—tobacco and salt. The government seems to see with jealousy the introduction of weapons and military stores. And well it may, since not only have rifles and cannon been introduced into Hungary from the Black Sea ports, but the Herzegovina has been supplied with arms, which it is now using in a furious insurrection against the Porte. Hence, by the 10th article, it is stipulated that French (or English) subjects for the future shall not be able "to import either cannon, powder, arms or munitions of war. The trade in these different articles rests altogether under the immediate surveillance of the Ottoman government, which retains the right of regulating the same." The time during which the treaty is to be in force, and the provinces to which it is to extend, are declared by the 16th article. The term is twenty-eight years, yet each of the high contracting parties reserves to itself the power to propose, at the expiration of ten years, the modifications which experience may suggest. The treaty is to be binding throughout the whole empire, including not only Egypt, "but the other parts of Africa under the dominion of the Sublime Porte;" that is, Tripoli and Tunis. It will also extend to Servia, and the highly prosperous community of the Danubian provinces. An empire inhabited by races so much inclined by nature to commerce as the Levantines cannot but prosper under the commercial freedom which is being so rapidly established in Western Europe. Extravagance among the high, apathy among the low, will always be a bar to Mussulman progress; but the Turks do not form the whole of the Sultan's subjects, and there are millions who will become better customers of Great Britain through the reforms which the Porte is about to accomplish.

FREE PORTS IN CANADA.

The Canadian Government *Gazette*, of the 31st December, contains the proclamation establishing the free ports at Gaspé and Sault Ste. Marie. Their boundaries are as follows: The limits at the free port of Gaspé extend "three miles inland from low-water mark" around all the shores of Gaspé Basin; and the district which is annexed to the port, and to which goods may be exported from Gaspé free, comprehends the whole of the eastern peninsula, from River Châte round to River Nouvelle, (Bay of Chaleurs,) also the Magdalen Islands, the Island of Anticosti and the north shore of the St. Lawrence from Point des Monts to Labrador. Vessels and goods that have been duly reported and entered either for duty or for the warehouse at any Canadian port of entry, may be taken direct from such port to New-Carlisle or Paspé and to Percé, and there reported, entered and landed free of duty, as if they were entered at Gaspé. The exportation of fish may also be made direct from these outposts, as well as from Gaspé. The limits of the free port of Sault Ste. Marie are co-extensive with the town plot there, and the district annexed to it comprehends the north shores of the great lakes; or, indeed, the whole unsettled part of Canada west of the meridian 81 degrees W. The Manitoulin Islands are included within its boundaries. The regulations under which trade with these free ports is to be carried on will, no doubt, be published in future *Gazettes*.

NOTICE TO MARINERS.

NEW-GRANADIAN CONSULATE, *New-York*, April 10, 1861.

The undersigned respectfully requests the editor of the *Herald* to give publicity to the following official communication.

G. DOMINGUEZ, *Consul*.

[Translation.]

NEW-GRANADIAN LEGATION IN THE UNITED STATES.

G. DOMINGUEZ, Esq., *Consul of the Confederation, New-York*:

You are hereby requested to make known to all ship-owners, shippers and insurers, whom it may concern, that in conformity with a decree issued by authority of the government of the Confederation, the ports of Rio Hacha, Santa Martha, Cartagena and Zapote, in the Atlantic, and those of Buenaventura, Tomaco and Izpuande, in the Pacific, together with the rivers of Quibdo and Novita, remain closed against commerce; also, that war vessels of the Confederation have received orders to cruise about said ports, and to seize, in accordance with the above mandate, all vessels found trading with said ports in violation of this prohibitory decree. This latter clause is temporal in its character, continuing in force until such time that order shall be restored in those sections.

With sentiments of the highest consideration, I remain your obedient servant,

RAFAEL POMBO.

STOP LAW IN TENNESSEE.

The following is a copy of the bill prescribing the remedy for the collection of debts and relief for the people, as it finally passed through the legislature and is now a law:

SECTION 1. *Be it enacted by the General Assembly of the State of Tennessee*, That from and after the passage of this act all judgments and decrees which shall be rendered in any of the courts of record in this State, or which shall be rendered by justices of the peace of this State for money, shall be stayed by such courts and justices for the period of twelve months from the rendition of such decree or judgment: *Provided*, That the defendant or defendants in said judgments or decrees shall appear before said courts of record during the term of such court, or within two days after the rendition of the judgment, before justices of the peace, and give good and ample security for the stay of execution, to be approved of by said courts or justices, which stay shall operate as a judgment against the security in said courts or before said justices.

SEC. 2. *Be it further enacted*, That upon affidavit of the plaintiff in the judgment, his agent or attorney, made before the court or justice of the peace, or before the clerk of said court if in vacation, showing that the security for the stay of execution is not good and sufficient, the defendant, upon five days' notice being given, shall justify the security already given, or give other security to be approved of by the justice of the peace, or by the court, if in session, and if in vacation by the clerk of said court, and upon his failure to justify or give other security, execution shall issue immediately. If the additional security shall be taken by a justice of the peace, it shall be sufficient to bind the security if he write his name as additional

**NEW
ENGLAND
MUTUAL**



**LIFE
INSURANCE
COMPANY.**

WILLARD PHILLIPS, President.

R. F. STEVENS, Secretary.

The last year was one of marked prosperity. Number of policies issued, 351 more than the year previous. Net income, \$149 000, an increase of \$39 000. The addition to the accumulated fund, \$861,000, an increase of \$121,000. The Company has paid during its existence (17 years) nearly a MILLION in Losses; almost a MILLION in cash dividends to policy holders; and have nearly TWO MILLIONS well invested to meet Losses. Economy, care to its risks, and prudent investments, characterize this Company. The Mutual principle insures at the lowest possible rate; the surplus being returned dividends *pro rata* to all insured. Documents of an interesting character, showing the benefit of the Mutual plan, forwarded gratis, upon application.

JOHN HOPPER, Agent and Attorney for the Company,

110 Broadway, (corner of Pine Street,) New-York.

Notice to Subscribers to the Merchants' Magazine.

The undersigned, for three years Publishers of the **MERCHANTS' MAGAZINE**, have sold this work, and all our right, title and interest therein, to **Mr. WILLIAM B. DANA**, late of Utica, New-York, to whom only all letters, communications and remittances for the work should be addressed.

GEORGE W. & JOHN A. WOOD.

New-York, February 14, 1861.

Notice to the Subscribers to the Merchants' Magazine.

In assuming the publication of **THE MERCHANTS' MAGAZINE**, the undersigned gives notice to the subscribers that there will be no essential change in the features of the work. It will, however, be the object of the Proprietor, not only to sustain its previous character as a record of sound political economy and of commercial statistics, but to add the following desirable information:

I. A record of the proceedings of the Chamber of Commerce, New-York, and of the Boards of Trade at Boston and Philadelphia.

II. A monthly list of Marine Losses, showing the name of the vessel, where bound, names of owner, captain, &c., and amount of loss, whether total or partial.

III. A copious digest and careful examination of all important decisions in

place designated therein, and the officer shall proceed to expose the same to public sale to pay said debt: *Provided*, The parties to the original judgment may give new, good and sufficient security, as now provided by law.

SEC. 7. *Be it further enacted*, That delivery bonds given under the provisions of this act shall have the same effect and be governed in all respects by the laws now in force in reference to delivery bonds, except so far as the same may conflict with this act.

SEC. 8. *Be it further enacted*, That if any party, upon being notified to give additional security, and shall fail to do so, then the officer shall proceed and sell the property levied upon as though no delivery bond had been given.

SEC. 9. *Be it further enacted*, That this act shall not apply to actions or judgments against executors, administrators or other persons acting in a fiduciary capacity for money due by them to distributees, legatees or others, and which has been actually collected by them.

SEC. 10. This act shall expire by its own limitation on the first day of July, 1862.

Passed January 26, 1861.

W. C. WHITTHORNE,
Speaker of the House of Representatives.
TAL. W. NEWMAN,
Speaker of the Senate.

(A true copy.)
J. E. R. RAY, *Secretary of State.*

COMMERCIAL CHRONICLE AND REVIEW.

THE disastrous uncertainty which attended political events continued during the month to act adversely upon commercial enterprise, and, as a consequence, the currents of business gradually dried up, leaving a degree of stagnation in most pursuits, both trading and producing, to which the country has long been a stranger. It resulted that capital, which had, during the activity of business, been invested in goods, manufactured and imported, and which had been spread over the surface of the country in exchange for the paper of purchasers, gradually flowed back on the maturity of the paper, into the great reservoirs, where it accumulates to an unwonted extent. The banks of four leading cities hold \$83,000,000 of specie, which still accumulates. The payments from the interior are through the medium of produce, which has been forwarded to an extent so far in excess of the importations of goods as to bring a large balance in specie into the country; and New-York held over \$40,000,000 idle in bank, while it was freely offered at 4 @ 4½ per cent., without takers. No two facts could more clearly illustrate the utter prostration of business than the idleness of this vast capital, while it is offered at unprecedentedly low rates, precisely at that period of the year when usually it is most active. The trade tables, as usual, at the close of this article indicate the decline of importations and the disturbance caused by the

operation of the new tariff, which went into operation April 1st. The amount of goods in bond, February 1st, was \$24,092,879; this, by the effect of small importations, was reduced to \$21,438,561. During the month of March the importations of merchandise have been \$12,657,941, or about half the amount of those of the corresponding month last year. This, added to the amount in bond on the first of the month, gives \$34,096,506 as the supply of goods in all March, against, for the corresponding month in 1860, \$9,755,890 in bond, and \$23,495,082 imported, or, together, \$33,250,922. The supply of goods was thus larger this year. A considerable portion of these, however, required to be taken out of bond before the 1st of April, in order to avoid the new tax, and other goods, as sugar, went into bond in order to avail of the lessened duty by the new tariff. Of the amount of goods (\$5,781,728) withdrawn, \$4,741,059 was dry goods. The effect of the tariff was thus to cause the withdrawal of goods in the last week of March and in the first week of April to be very active under the old tariff. These operations do not, however, indicate any improved demand for goods, but merely the movements to avail of the lowest duties. The effect of this was, notwithstanding the dullness of business, to raise the revenue of the two weeks ending with August 6th to \$1,500,667, against \$1,471,241 in the corresponding two weeks of 1860. This fact supported the credit of the government during the pendency of the loan, for which proposals were issued March 22, to the extent of \$8,000,000. The stock offered bore 6 per cent. semi-annual interest, twenty years to run. Those bids were offered on the 2d April during a period of returning confidence that peace would be maintained. On opening the bids it was found that for \$3,100,000 a rate of 94 c. was offered, or about $3\frac{1}{2}$ per cent. higher than the previous loan; about $93\frac{1}{2}$ c. was offered for sums equal to a balance of the loan, or three per cent. higher than the rate at which the previous loan had been issued. The whole amount offered was over \$30,000,000. The Department thought proper to reject all bids below 94, an unprecedented action which was received with disfavor. The rejection of the money seemed, however, to confirm the public impression that no measures tending to bring on collision would be attempted. Rumors, however, became suddenly rife that great activity prevailed in the army and navy, with the view to such measures as might bring on hostilities. Eight steamers were chartered by the government, viz., the ATLANTIC, BALTIC, ILLINOIS, OCEAN QUEEN, FASHION, THOMAS FREEBORN, COATZACOALCOS and YANKER, besides the STAR OF THE WEST, EMPIRE CITY, &c., were all armed and provisioned. Most of these vessels sailed under sealed orders. These facts produced much uneasiness, and, in the midst of the uncertainty, the Department issued proposals for 6 per cent. Treasury Notes for the balance of the loan, payable within two years, and convertible into a 20 year stock, at the pleasure of the holder. The bids were to be opened on the 11th, but as it was found, up to the last moment, only \$1,000,000 was offered, several bank officers interested in the credit of the government requested that the opening might be delayed until they could make further effort. The amount was, with much exertion, finally made up at par. It will be borne in mind first, that money can with difficulty be put out at 4 per cent. on the best stocks. The banks have over \$43,000,000 lying idle; and that the stock at 94 would give an interest of 6.38 per cent., or $2\frac{3}{4}$ per cent. more than could be got at call in the open market. In the case of the Treasury

Notes, they are receivable for customs, and the large importers have always large sums lying in bank to meet duties. These, in ordinary times, may be employed "at call" at 7 per cent. They can now be hardly employed at all. These funds, invested in the Treasury Notes receivable for duties, would be earning 6 per cent. until wanted, on a perfect security. Many of the importers, therefore, took them at par, but the amount of duties to be paid in case of disturbance may be small, and large issues of notes might cause them to fall. The great amount lying idle and still accumulating must, however, be employed, and the government loan seems to present the only mode of employing them. Many of the States and cities are also issuing loans for army purposes, but the constitutions of many prevent more than an issue of \$1,000,000 in a year, except in case of invasion. The government would, no doubt, get all the money it can want at a rate which would yield 7 per cent. interest. New-York City offered \$375,000 water loan; and \$421,000 was bid at par and over, April 20.

The rates of money in the open market of course declined under this state of things, as follows:

RATES OF MONEY IN NEW-YORK.

1861.	On call.		Endorsed.				Single names.	Other good.	Not well known.
	Stocks.	Other.	60 days.	4 to 6 months.	10	12			
Jan. 1.	5½ @ 6½	8 @ 10	10 @ 12	18 @ 15	18	18	—	—	—
Jan. 15.	5 @ 6	6 @ 7	7 @ 8	8 @ 9	8	10	12 @ 16	18 @ 24	
Feb. 1.	5 @ 6	6 @ 7	7 @ 8	8 @ 9	8	10	12 @ 15	18 @ 24	
Feb. 15.	5 @ 6	— @ 7	7½ @ 8	8 @ 9	8	10	12 @ 15	18 @ 24	
Mar. 1.	5½ @ 6½	6½ @ 7	7½ @ 8	8 @ 9	8	11	12 @ 15	18 @ 24	
Mar. 15.	5 @ 6	6 @ 7	5½ @ 6	6½ @ 7	7	8	12 @ 15	18 @ 24	
April 1.	5 @ 5½	6 @ 6½	5½ @ 6	6½ @ 7	7	8	9 @ 12	12 @ 24	
April 15.	4½ @ 5½	6 @ 6½	5½ @ 6	6½ @ 7	7	8	9 @ 12	12 @ 24	

The decrease of business necessarily brought with it a decrease of good business paper, while a good deal of endorsed paper has been gradually got under in the course of collections, or altogether thrown out of the circle of negotiation. The funds accumulate and the demand lessens. The large exports of produce, in face of diminished imports of goods, continues to produce its legitimate effects upon the course of exchange, which, after a disposition to rise, again had a declining tendency. The comparative rates are as follows:

RATES OF BILLS IN NEW-YORK.

1860.	London.	Paris.	Amsterdam.	Frankfort.	Hamburg.	Berlin.
Dec. 1.	1 @ 5	5.47½ @ 5.40	89½ @ 40½	40 @ 40½	84½ @ 85½	69½ @ 76½
Dec. 15.	1 @ 4	5.00 @ 5.50	89 @ 89½	89 @ 89½	84½ @ 84½	72½ @ 78½
1861.						
Jan. 1.	3½ @ 5	5.40 @ 5.45	88½ @ 89½	89½ @ 89½	84½ @ 85	68½ @ 69½
Jan. 15.	5½ @ 6½	5.80 @ 5.88½	40 @ 40½	40½ @ 40½	85½ @ 85½	70½ @ 70½
Feb. 1.	5 @ 6	5.87½ @ 5.85	40 @ 40½	40½ @ 40½	85½ @ 86	70½ @ 70½
Feb. 15.	5 @ 5½	5.42½ @ 5.35	89½ @ 40½	40½ @ 40½	85½ @ 85½	70½ @ 70½
Mar. 1.	3½ @ 6	5.40 @ 5.35	89½ @ 40½	40½ @ 40½	85½ @ 85½	70½ @ 71
Mar. 15.	6 @ 6½	5.87 @ 5.80	40 @ 40½	40½ @ 40½	86 @ 86½	70½ @ 71½
April 1.	7½ @ 8½	5.26½ @ 5.23½	40½ @ 40½	40½ @ 41	85½ @ 86	71½ @ 72
April 15.	6 @ 7	5.85 @ 5.80	40 @ 40½	40 @ 40½	85 @ 85½	71 @ 71½

Following these rates of bills, not only have the gold receipts from California remained on this side, but the arrivals from abroad have continued large, swelling the receipts at New-York to double those of last year.

GOLD RECEIVED FROM CALIFORNIA AND EUROPE AND EXPORTED FROM NEW-YORK WEEKLY,
WITH THE AMOUNT OF SPECIE IN SUB-TREASURY, AND THE TOTAL IN THE CITY.

1860.				1861.			
Received.		Exported.		Received.		Specie in Sub-Treas.	Total in the City.
January 5,...	...	\$85,080 ..	...	\$1,432,657 1,333,100*	...	\$2,645,437 ..	\$23,435,000
January 12,...	\$1,788,686 ..	88,493 ..	...	1,446,319 1,400,000*	...	2,584,455 ..	26,045,300
January 19,...	...	359,400 ..	...	1,693,053 ..	...	2,166,242 ..	31,764,709
January 26,...	1,760,592 ..	81,900 ..	...	1,946,029 ..	\$22,855 ..	5,751,298 ..	34,790,300
February 2,...	94,596 ..	427,457 ..	...	1,513,693 1,900,006*	299,669 ..	4,323,000 ..	35,393,000
February 9,...	1,476,621 ..	92,850 ..	...	800,000 ..	115,698 ..	3,644,921 ..	33,300,590
February 16,...	...	592,997 ..	...	1,616,111 ..	117,101 ..	3,356,000 ..	40,475,000
February 23,...	1,893,179 ..	902,000 ..	...	2,291,243*	187,258 ..	3,336,700 ..	41,881,000
March 2,...	832,508 ..	667,293 ..	...	855,755 ..	176,161 ..	9,166,080 ..	43,646,000
March 9,...	1,198,711 ..	115,478 ..	...	2,356,000*	...	7,524,637 ..	41,417,000
March 16,...	152,000 ..	429,260 ..	...	3,040,000* 815,524	122,316 ..	6,730,805 ..	42,240,000
March 23,...	895,386 ..	465,115 ..	...	1,849,262*	128,376 ..	6,240,519 ..	45,721,258
March 30,...	155,110 ..	704,006 ..	...	...	16,068 ..	6,092,841 ..	47,500,149
April 6,...	...	310,068 ..	...	996,445 ..	623,708 ..	8,436,494 ..	50,192,053
April 13,...	1,146,911 ..	690,010 ..	...	1,110,231 ..	...	10,441,273 ..	52,266,896
April 20,...	...	241,508 ..	...	873,000 ..	...	11,095,043 ..	51,673,223
\$10,443,515 ..		\$5,394,908 ..	...	\$27,228,522 ..	\$1,800,225 ..	...	...

The New-York Assay Office has continued unusually active under this flow of specie, as follows :

NEW-YORK ASSAY OFFICE—DEPOSITS.

	Foreign.				United States.				
	Gold.		Silver.		Silver.		Payments in		
	Coin.	Bullion.	Coin.	Bullion.	Gold.	Coin.	Bullion.	Bare.	Coin.
Jan.,.....	\$4,500,000	\$1,000,000	\$9,000	\$40,000	\$2,539,000	\$20,000	\$57,000	\$2,000	\$3,213,000
Feb.,.....	2,140,000	1,300,000	61,000	34,000	1,508,000	...	51,000	15,000	5,084,000
Mar.,.....	2,700,000	500,000	60,000	65,000	1,860,000	15,300	24,800	260,000	4,945,000
Total,	\$9,340,000	\$2,700,000	\$170,000	\$139,000	\$5,962,000	\$35,300	\$132,800	\$277,000	\$18,192,000
" 1860,	27,000	61,000	41,100	43,500	8,693,000	2,900	80,000	1,759,000	3,142,500
" 1859,	18,000	26,000	168,080	12,000	1,355,000	8,800	14,620	1,392,000	553,000

The Mint has also been very active in its coinage, as follows :

UNITED STATES MINT—PHILADELPHIA.

	Deposits.		Coinage.			
	Gold.	Silver.	Gold.	Silver.	Cents.	Total.
January,.....	\$8,909,669 ..	\$154,418 ..	\$8,052,321 ..	\$91,100 ..	\$5,000 ..	\$8,148,421
February,.....	5,244,816 ..	153,861 ..	7,433,016 ..	121,700 ..	12,000 ..	7,571,717
March,.....	6,967,387 ..	242,278 ..	5,049,327 ..	287,500 ..	9,000 ..	5,347,237
Total,.....	\$20,421,573 ..	\$552,047 ..	\$20,540,164 ..	\$500,300 ..	\$26,000 ..	\$21,067,465
" 1860,	2,303,056 ..	163,893 ..	2,874,174 ..	195,589 ..	77,000 ..	2,947,763
" 1859,	295,195 ..	236,925 ..	327,327 ..	291,000 ..	89,000 ..	707,237

The coinage at New-Orleans has continued to be in the dies of the federal government.

The depression in importations, that was so marked in February, has become more evident in March, in which the aggregate receipts of goods

* From Europe.

have been less than in any year for that month, except 1858, when the accumulations in warehouse, caused by the panic of 1857, hung over the market. The quantities of goods entered for consumption are very small, but the importation of specie has been large. The figures for the month are as follows :

FOREIGN IMPORTS AT NEW-YORK IN MARCH.

	1858.	1859.	1860.	1861.
Entered for consumption,...	\$ 7,245,526 ..	\$ 15,814,023 ..	\$ 16,163,698 ..	\$ 6,700,061
Entered for warehousing,...	1,812,280 ..	2,804,413 ..	3,739,241 ..	3,084,187
Free goods,.....	2,394,743 ..	2,620,354 ..	3,592,093 ..	2,878,697
Specie and bullion,.....	277,203 ..	81,666 ..	85,094 ..	5,546,406
Total entered at the port,...	\$ 11,729,702	\$ 20,820,456	\$ 23,580,126	\$ 18,204,351
Withdrawn from warehouse,	4,444,415	1,718,237	2,200,117	5,817,144

The warehouse operations for the month seem to have been large; about three millions were entered, and nearly six millions withdrawn. The operation was probably to withdraw those goods on which the duty was to increase after April 1st, and replace them with those on which there was to be a decline. The result is a diminution of three millions of the quantity in bond. There is a decline in the import of free goods and a large increase in that of specie. The movement since January 1st, or the third quarter of the fiscal year, has been as follows :

FOREIGN IMPORTS AT NEW-YORK FOR THREE MONTHS, FROM JANUARY 1ST.

	1858.	1859.	1860.	1861.
Entered for consumption,...	\$17,255,799 ..	\$46,102,196 ..	\$47,151,912 ..	\$21,882,297
Entered for warehousing,...	5,052,301 ..	5,270,622 ..	7,868,276 ..	15,396,545
Free goods,.....	5,909,530 ..	7,498,796 ..	9,174,271 ..	9,011,925
Specie and bullion,.....	826,834 ..	245,174 ..	308,319 ..	15,082,702
Total entered at the port,...	\$29,044,464	\$59,116,788	\$64,692,778	\$61,373,469
Withdrawn from warehouse,	13,682,712	5,974,505	7,502,790	14,142,145

The figures for the three months show a slight increase of goods in bond April 1st, as compared with January 1st. The importation of specie was over fifteen millions—a larger sum than was perhaps ever before imported from abroad in a similar period. The importations of goods for consumption were very small. If we take the aggregate imports for the nine months of the fiscal year we find the results as follows :

FOREIGN IMPORTS AT NEW-YORK FOR NINE MONTHS, ENDING MARCH 31.

	1858.	1859.	1860.	1861.
Six months,.....	\$ 109,688,702 ..	\$ 91,082,433 ..	\$ 116,000,642 ..	\$ 120,542,384
January,.....	8,105,719 ..	19,447,962 ..	21,756,273 ..	26,827,411
February,.....	9,209,043 ..	18,848,370 ..	19,356,379 ..	16,341,707
March,.....	11,729,702 ..	20,820,456 ..	23,580,126 ..	18,204,351
Total for 9 months,...	\$ 138,733,166	\$ 150,199,221	\$ 180,693,420	\$ 181,915,853

These importations are, in the aggregate, a little more than last year, but include \$23,248,195 of specie imported from abroad in nine months. The largest amount of specie ever before imported in a whole year was \$24,121,289, in 1847. That amount was nearly equalled in the first nine months, and will be, by far, exceeded for the whole year. The lessened amount of goods imported has, as a matter of course, shown its effect in the duties, which have been as follows :

CASH DUTIES RECEIVED AT NEW-YORK.

	1859.	1860.	1861.
Six months ending Jan. 1..	\$ 15,387,614 49 ..	\$ 19,322,060 96 ..	\$ 17,637,802 21
In January,.....	3,478,471 38 ..	3,899,166 17 ..	2,060,202 34
February,.....	3,328,688 93 ..	3,378,043 28 ..	2,528,736 83
March,.....	3,164,011 00 ..	3,477,545 74 ..	2,439,926 25
Total, nine months,.....	\$ 25,358,785 80	\$ 30,076,816 15	\$ 24,656,667 63

The average duty on dutiable imports was 20 per cent. up to April 1st, under the tariff of 1857. The amount entered for consumption and withdrawn from warehouse in March was \$12,517,205, which gave \$2,437,926 customs, one-half of which was, on withdrawal of goods to avoid higher charges after April 1st. The result shows a decline of \$3,681,000 in duties for the quarter. The proportion of dry goods that was embraced in the above aggregate is seen in the following table. The withdrawals of dry goods prior to the operation of the new tariff were large :

IMPORTS OF FOREIGN DRY GOODS AT NEW-YORK FOR THE MONTH OF MARCH.

ENTERED FOR CONSUMPTION.

	1858.	1859.	1860.	1861.
Manufactures of wool.....	\$ 1,070,923 ..	\$ 3,300,832 ..	\$ 2,718,762 ..	\$ 1,319,422
Manufactures of cotton,.....	881,079 ..	2,546,372 ..	1,628,745 ..	642,522
Manufactures of silk,.....	2,028,145 ..	2,729,037 ..	2,597,933 ..	1,648,354
Manufactures of flax,.....	361,387 ..	1,119,172 ..	844,030 ..	326,280
Miscellaneous dry goods,....	352,779 ..	583,420 ..	529,958 ..	371,520
Total,.....	\$ 4,694,313	\$ 10,178,833	\$ 8,319,423	\$ 4,308,098

WITHDRAWN FROM WAREHOUSE.

Manufactures of wool,.....	\$ 552,770 ..	\$ 158,687 ..	\$ 259,623 ..	\$ 1,454,908
Manufactures of cotton,....	779,075 ..	192,028 ..	336,788 ..	1,260,012
Manufactures of silk,.....	550,331 ..	65,919 ..	106,413 ..	1,301,512
Manufactures of flax,.....	301,285 ..	122,261 ..	91,029 ..	462,361
Miscellaneous dry goods,....	223,655 ..	62,536 ..	72,803 ..	262,266

Total,.....	\$ 2,412,116	\$ 601,631	\$ 866,656	\$ 4,741,059
Add entered for consumption,	4,694,313	10,178,833	8,319,423	4,308,098

Total thrown upon market,	\$ 7,106,429	\$ 10,780,664	\$ 9,186,079	\$ 9,049,157
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ENTERED FOR WAREHOUSING.

Manufactures of wool,.....	\$ 209,859 ..	\$ 132,723 ..	\$ 224,154 ..	\$ 452,981
Manufactures of cotton,....	254,105 ..	134,438 ..	182,654 ..	381,902
Manufactures of silk,.....	133,528 ..	28,413 ..	112,344 ..	386,854
Manufactures of flax,.....	137,774 ..	51,457 ..	60,304 ..	164,129
Miscellaneous dry goods,....	89,216 ..	36,103 ..	123,513 ..	142,162

Total,.....	\$ 824,482	\$ 383,134	\$ 702,980	\$ 1,527,978
Add entered for consumption,	4,694,313	10,178,833	8,319,423	4,308,098

Total entered at the port,.	\$ 5,518,795	\$ 10,561,967	\$ 9,022,403	\$ 5,836,076
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IMPORTS OF FOREIGN DRY GOODS AT THE PORT OF NEW-YORK, FOR THREE MONTHS, FROM JANUARY 1st.

ENTERED FOR CONSUMPTION.

Manufactures of wool,.....	\$ 2,450,086 ..	\$ 8,050,711 ..	\$ 8,880,598 ..	\$ 4,367,448
Manufactures of cotton,.....	2,392,849 ..	8,187,441 ..	6,716,159 ..	2,061,794
Manufactures of silk,.....	4,197,493 ..	9,158,666 ..	12,157,068 ..	5,336,690
Manufactures of flax,.....	903,725 ..	3,111,272 ..	2,583,717 ..	960,822
Miscellaneous dry goods,....	866,402 ..	1,801,925 ..	1,706,132 ..	1,194,413

Total,.....	\$ 10,810,555	\$ 30,390,015	\$ 32,043,674	\$ 13,911,167
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WITHDRAWN FROM WAREHOUSE.

	1858.	1859.	1860.	1861.
Manufactures of wool,....	\$ 1,464,836 ..	\$ 529,427 ..	\$ 796,104 ..	\$ 2,927,757
Manufactures of cotton,...	2,238,947 ..	953,658 ..	1,377,605 ..	2,678,006
Manufactures of silk,.....	1,889,397 ..	349,201 ..	657,032 ..	2,848,747
Manufactures of flax,.....	1,020,478 ..	475,162 ..	360,976 ..	1,960,278
Miscellaneous dry goods,...	618,273 ..	189,708 ..	234,612 ..	555,678
Total,.....	\$ 7,231,431	\$ 2,497,156	\$ 3,426,229	\$ 10,068,466
Add entered for consumption, 10,810,555		30,390,015	32,043,474	13,911,137
Total thrown on market, \$ 18,041,986		\$ 32,887,171	\$ 35,469,703	\$ 23,979,603

ENTERED FOR WAREHOUSING.

	1858.	1859.	1860.	1861.
Manufactures of wool,....	\$ 640,756 ..	\$ 361,228 ..	\$ 876,629 ..	\$ 2,777,548
Manufactures of cotton,...	1,170,681 ..	474,500 ..	805,434 ..	2,813,208
Manufactures of silk,.....	686,794 ..	185,108 ..	515,199 ..	2,711,770
Manufactures of flax,.....	379,810 ..	151,114 ..	185,081 ..	895,940
Miscellaneous dry goods,...	255,045 ..	92,814 ..	244,274 ..	496,236
Total,.....	\$ 3,132,586	\$ 1,264,764	\$ 2,626,617	\$ 9,664,732
Add entered for consumption, 10,810,555		30,390,015	32,043,474	13,911,137
Total entered at the port, \$ 13,943,141		\$ 31,654,779	\$ 34,673,091	\$ 23,575,869

The export trade shows a very different result, the amount of domestic produce sent abroad being much larger than ever before in March. At the same time the export of specie has been comparatively nominal; exclusive of specie the aggregate is larger than ever before, for March, as follows:

EXPORTS FROM NEW-YORK TO FOREIGN PORTS FOR THE MONTH OF MARCH.

	1858.	1859.	1860.	1861.
Domestic produce,.....	\$ 4,503,871 ..	\$ 5,377,840 ..	\$ 6,998,687 ..	\$ 10,580,907
Foreign mdse., (free),...	27,590 ..	200,779 ..	844,716 ..	839,415
Foreign mdse., (dutiable)	649,899 ..	297,383 ..	285,351 ..	109,270
Specie and bullion,.....	836,194 ..	3,343,677 ..	2,381,663 ..	301,802
Total exports,	\$ 6,017,054	\$ 9,219,678	\$ 10,510,417	\$ 11,831,394
Total, exclusive of specie,	5,180,860	5,876,001	8,182,754	11,529,592

The operations for the three months, since January 1, maintain the same features. The specie export is mostly doubloons sent back to Havana.

EXPORTS FROM NEW-YORK TO FOREIGN PORTS FOR THREE MONTHS, FROM JANUARY 1.

	1858.	1859.	1860.	1861.
Domestic produce,.....	\$ 12,421,547 ..	\$ 12,423,614 ..	\$ 17,997,216 ..	\$ 31,095,653
Foreign mdse., (free),...	855,577 ..	508,478 ..	954,348 ..	647,160
Foreign mdse., (dutiable)	1,267,052 ..	793,550 ..	1,875,522 ..	1,784,980
Specie and bullion,.....	9,328,725 ..	8,020,792 ..	4,212,234 ..	1,463,622
Total exports,	\$ 23,972,901	\$ 21,746,434	\$ 25,039,320	\$ 34,941,364
Total, exclusive of specie,	14,044,176	13,725,642	20,827,086	33,477,742

If now we compare the aggregate exports for nine months, exclusive of specie, we arrive at surprisingly large figures.

	1858.	1859.	1860.	1861.
Total, nine months,...	\$ 48,746,617 ..	\$ 41,720,476 ..	\$ 57,198,144 ..	\$ 93,402,176
Specie for same time,...	31,290,837 ..	21,662,564 ..	40,730,128 ..	22,075,041
Total exports,...	\$ 80,037,454 ..	\$ 63,383,040 ..	\$ 97,928,272 ..	\$ 115,477,217

RAIL-ROAD, CANAL AND STEAMBOAT STATISTICS.

RAIL-ROADS IN NORTH AMERICA.

By reports of the different rail-roads in the United States and Canada, for the year 1860, it appears that there were in operation, January 1, 1861, 350 different rail-roads, with 127 branches, embracing 33,021 miles of road, of which 47 roads, of 1,796 miles, are leased to other companies; 23 roads, of 3,075 miles, are in the hands of receivers or bondholders; the remaining 280 roads, of 28,150 miles, being operated by the owners. The several roads, as to gauge, are divided as follows:

14 roads, of.....	1,777 miles,.....	are 6 feet 0 inches.
21 "	2,896 "	" 5 " 6 "
2 "	182 "	" 5 " 4 "
63 "	7,267 "	" 5 " 0 "
39 "	3,294 "	" 4 " 10 "
1 "	120 "	" 4 " 9½ "
210 "	17,712 "	" 4 " 8½ "

Besides the numerous city or horse rail-roads, which are generally 4 feet 8½ inches or 4 feet 10 inches, except those in Philadelphia, which are 5 feet 2½ inches. The 5 feet 6 inch gauge is used exclusively in Canada, and partially in Maine and Missouri. The two of 5 feet 4 inches are in Ohio, viz., Sandusky, Mansfield and Newark, and the Sciota and Hocking Valley. The five foot gauge is the prevailing gauge throughout the Southern States, the Isthmus of Panama and California, with but few exceptions in Texas. The one of 4 feet 9½ inches, or compromise gauge, between 4 feet 8½ inches and 4 feet 10 inches, is the Tremont and Indiana. The 6 feet, 4 feet 10 inches and 4 feet 8½ inches are scattered through the Eastern, Middle and Western States. In the early history of rail-roads in America they were laid with timbers running lengthwise with strips of iron, 3½ inches wide, nailed or spiked on the top for the wheels to run upon; they were of five feet gauge, measuring from centre to centre of the iron or strap rail, as it was called; hence the origin of the 4 feet 8½ inch gauge. At a later date, when the solid iron rail was introduced, it was with a two-inch face also, the five foot gauge measuring from centre to centre of rails; hence the origin of the 4 feet 10 inch gauge; hence the conclusion, that if our system of measuring from inside to inside of the rails had been adopted at first, the uniform gauge of this country would have been five feet, instead of being overrun with so many different gauges, and such an enormous expense of reloading and changing cars, besides a great many other disadvantages attending the break of gauges.

NOTE TO OUR SUBSCRIBERS.—Owing to the space occupied by several elaborate reports in this No., we are compelled to defer to our next (or June) No. our usual Review of the Book Trade, &c.

The title is enclosed in a highly decorative frame. At the top, a classical figure, possibly a personification of Commerce or Industry, is shown reclining. The frame is adorned with intricate scrollwork and floral patterns. On the left and right sides, two female figures in classical attire are seated on pedestals, holding objects that symbolize the magazine's focus on commerce and industry. The background within the frame depicts a detailed landscape with a river, buildings, and a distant city.

HUNT'S

MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

ESTABLISHED BY FREEMAN HUNT.

Price \$5 per Annum.

PUBLISHED MONTHLY.

million dollars, has been established for the extension of cotton cultivation in Cuba.

Jamaica.—The British Cotton Company are steadily pursuing their initial experiment, and, as we are informed, with the most gratifying results, both as to the quality of cotton which has been raised, and as to benefit to the shareholders. It is thought that ere long this company will receive that support in Lancashire that will enable it extensively to widen its basis of operations. As the first company started in this country it deserves the special attention and encouragement of the trade.

Tobago—Barbadoes.—Several land-owners in these islands have planted areas of a few acres each.

British Honduras and Guatemala.—Experiments are being made in both these countries to introduce the cultivation among the people.

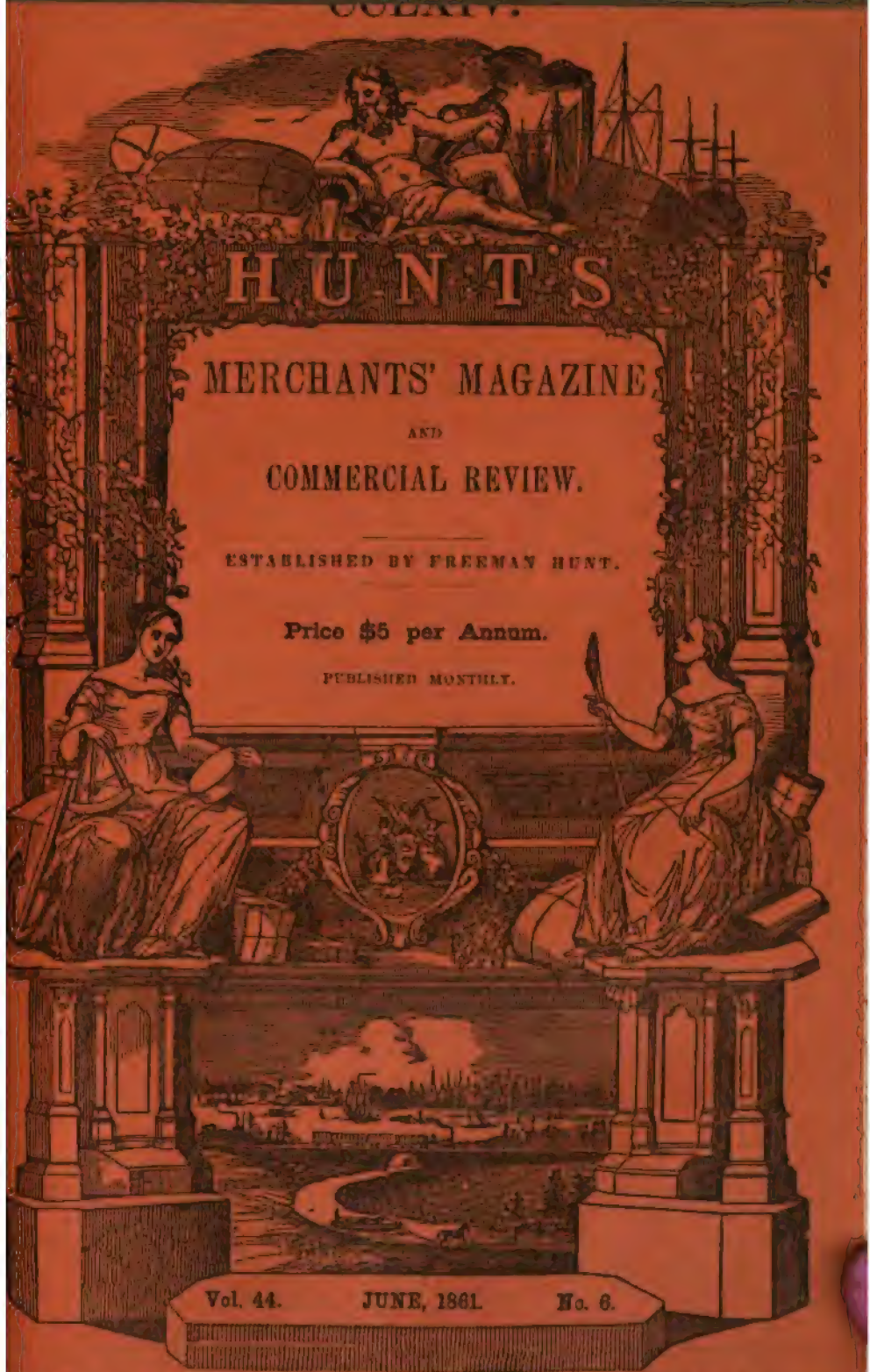
Peru.—In the north of Peru the proprietor of an extensive estate has let out portions of land to four cotton-growing companies, three of which are raising 200,000 plants each, and one 100,000 plants, in all 700,000. The estate is capable of growing at least 14,000,000 cotton plants. A large number of small farmers in the same district are also stated to be growing cotton on portions of their farms to a greater or less extent. Two landed proprietors, also in the province of Chiclaço, have begun to grow cotton; one of whom has recently visited this country to purchase machinery for a cotton plantation in Peru, and he has engaged a ship-load of two hundred and fifty Spanish emigrants, who have set sail for that country, where they will be solely employed in the raising of cotton and its preparation for export. He has constructed a canal, thirty-nine miles in length, to convey water from the Andes to his estate, for the purpose of irrigating his lands. This canal was begun about three years ago, without any idea of cotton cultivation. The operations of the Association having come to his knowledge, and finding that the soil is splendidly adapted for cotton planting, they are going into the cultivation with good earnest.

Venezuela—New-Granada.—The committee have furnished machinery and cotton seed to be employed at Maracaibo, Baranquilla and Sabinilla, where effort is being made to promote the growth and export of cotton, with fair prospect of success.

British Guiana.—In Demerara a missionary of the Church of England has recently been supplied with cotton seed, which he will distribute among the resident farmers. He purposes making a tour and lecturing in different towns and villages on the advantage of cotton cultivation.

EAST INDIES, AUSTRALIA, CEYLON, &c.

Batavia.—A member of the committee has received information that an extensive proprietor in Batavia has a large extent of land under cultivation. From New Orleans seed he has raised a crop of 272,000 lbs.



Vol. 44.

JUNE, 1861.

No. 6.

efforts with great interest, and they will be prepared to render their utmost aid within the limits of the rules of this Association to every well-considered and practicable scheme, having for its object the establishment of cotton-growing in Her Majesty's colonies.

Ceylon.—The Kandy Agricultural Society are endeavoring to extend the cultivation of cotton in this island, and have made application to the governor, Sir H. G. WARD, to encourage the inhabitants favorable to its growth, by granting them permission to pay for a certain period a portion of their taxation in cotton. The committee are informed by the Kandy Agricultural Society that "there are thousands of acres well adapted for cotton cultivation," and they trust hereafter to report that the culture has been extensively entered upon.

Pegu.—The attention of the committee has recently been drawn to an entirely new cotton field, by Captain RICHARD SPRYE. This gentleman advocates the opening of a new line of overland communication with the interior of China. He proposes the construction of a *cheap single line of railway for commerce* from Rangoon or Negrais, in the Bay of Bengal, through Her Majesty's territory of Pegu, and thence through a portion of the Burmese Territory to Esmok, in the Chinese province of Yunna. Rangoon is distant from Esmok 500 miles. The southern provinces of China are densely peopled, and abound with most valuable raw products. Situated 3,200 miles from Peking, the people are more free and open to foreign intercourse than the more exclusive populations of the north. They offer, therefore, an enormous market for British manufactures. The soils of Pegu and Burmah are admirably adapted to the growth of cotton. Captain SPRYE states that "when Dacca was in times past the great muslin-making place of the East, considerable quantities were sent from Burmah to that city, for the manufacture of those exquisitely fine muslins which were formerly made there;" and that, "under proper cultivation, with such a soil and climate, adapted to the growth of cotton, his belief is that Pegu, Burmah, and the adjacent Shan territories east of them, could produce annually *all the raw cotton* that England requires, and the whole of superior quality." The Chinese at the present time employ caravans, numbering 40,000 ponies, for carrying on trade with these regions. A railway, such as Captain SPRYE describes, would at once open a considerable source for the supply of cotton. Through its terminus, at Esmok, British merchandise would gain ready access to that vast network of water communication which intersects China, and in lineal extent reaches 15,000 miles. The opening of such a commercial artery into China, with her four hundred millions of population, would be a great gain for our manufactures; and if at the same time so ample a cotton-growing region could be laid under contribution, Captain SPRYE's scheme would be worthy of immediate adoption by capitalists, as a hopeful source of gain.

India.—Among the numerous regions to which the attention of the committee has been directed, none have presented so vast or hopeful a field for their labors as that of India: and while the difficulties they have

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AND
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J. SMITH HOBANS, (SECRETARY OF THE CHAMBER OF COMMERCE OF THE STATE OF NEW-YORK,)

AND WILLIAM B. DANA, ATTORNEY AT LAW.

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THE MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

JUNE, 1861.

THE FUTURE SUPPLY OF COTTON.

I. RAPID INCREASE IN SPINDLES, FACTORIES AND POWER LOOMS IN ENGLAND.—II. INCREASED IMPORTATIONS FROM THE UNITED STATES AND FROM INDIA.—III. MOVEMENTS OF THE MANCHESTER COTTON SUPPLY ASSOCIATION.—IV. INCREASED GROWTH OF COTTON IN TURKEY, GREECE, CYPRUS, ASIA MINOR, EGYPT, MADEIRA, SIERRA LEONE, LIBERIA, THE GOLD COAST, THE RIVER NIGER, NATAL, CAPE COLONY, CUBA, JAMAICA, BARBADOS, PERU, NEW-GRENADA, BRITISH GUIANA, EAST INDIES, JAVA, BATAVIA, AUSTRALIA, CEYLON, PEGU, INDIA.

The future supply of cotton throughout the world is one of the most important of the commercial questions of the day. England, in justice to herself, and to make her mills and machinery independent of any one source of supply, has been for years using strenuous exertions towards extending the area of cotton cultivation.

We now have recent information from the East Indies, Africa, &c., which shows that these exertions will lead to important results. This is a matter of vital moment to England. In the year 1839 there were in Great Britain 1,819 cotton factories; worked by horse-power of steam, 46,827; and of water, 12,977; and by persons of all ages and both sexes, 259,385.

The census of 1851, and careful inquiries in 1856, show the rapid consumption of cotton in that country. The following table gives the figures for 1850 and 1856. They are taken from returns made to Parliament:

YEARS.	<i>Fact. in G. Brit.</i>	<i>Spindles.</i>	<i>Power Looms.</i>	<i>Persons Employed.</i>	HORSE POWER.	
					<i>Of Steam.</i>	<i>Of Water.</i>
1850,	1,932 ..	20,977,017 ..	248,627 ..	330,924 ..	71,005 ..	11,550
1856,	2,210 ..	28,010,217 ..	298,847 ..	397,213 ..	88,001 ..	9,131

In 1850 the whole value of the cotton manufacture did not exceed £45,826,000; in 1856 it was £57,074,000; in 1859 nearly £72,000,000; now it must be much nearer £80,000,000 than £70,000,000. If this be borne in mind, it will be at once perceived how very much the present

condition of affairs must exceed the statements for former times. About a sixth of the number of persons employed are children, or very young persons, and it was estimated in the beginning of last year that the number of persons employed in the manufacture could not be under 500,000. On the whole, if we add five or six hundred to the number of factories of Great Britain returned in 1856, and augment the other items of the account in proportion, we shall possibly not be very much in error as to the present dimensions of the trade.

Looking at the statistics of the supplies from the different sources during the last seven years, we find that England has received the following number of bales from each source :

YEARS.	U. States.	Brazil.	W. Indies.	Egypt.	E. Indies.	Total.
1854,	1,667,902 ..	107,037 ..	8,225 ..	81,218 ..	308,184 ..	2,172,593
1855,	1,626,086 ..	134,528 ..	6,708 ..	113,961 ..	396,027 ..	2,277,310
1856,	1,758,295 ..	121,531 ..	11,323 ..	113,111 ..	459,508 ..	2,463,768
1857,	1,481,717 ..	168,340 ..	11,467 ..	75,598 ..	680,466 ..	2,417,588
1858,	1,855,340 ..	108,886 ..	6,867 ..	101,405 ..	350,218 ..	2,422,746
1859,	2,086,341 ..	124,837 ..	8,338 ..	99,876 ..	509,688 ..	2,829,110
1860,	2,380,843 ..	103,050 ..	9,956 ..	109,985 ..	562,852 ..	3,366,686

England pays annually from one hundred and sixty to one hundred and seventy millions of dollars for cotton from all parts of the world, and after producing goods for the consumption of her own people, exports to foreign countries over fifty millions sterling in cotton goods. The profits to England on the manufactures of cotton goods may be readily estimated at nearly three hundred millions of dollars. The following statements embrace nearly all the facts reported by the Manchester Supply Association :

At the last annual meeting of the Manchester Cotton Supply Association, it was moved by Lord ALFRED CHURCHILL, M. P., seconded by T. G. BARING, Esq., M. P., supported by HYDUR JUNG BAHADOOR, J. LYONS McLEOD, Esq., the Rev. GEORGE PRITCHARD, the Hon. ALGERNON EGGERTON and EDWIN A. HICKEY, Esq., and passed unanimously :

"That as the opening up of new sources for the supply of cotton has become a question of great national interest, it is incumbent upon all classes of the community to support the movement now in progress for promoting the growth of cotton in Africa, Australia, South America, the West Indies and other countries ; that, as the development of the resources of India is of vast importance to this country, it is the bounden duty of Her Majesty's government to give every encouragement to the unfettered action of private enterprise and public companies, whether for the cultivation of cotton, the opening of river navigation, the construction of canals or other public works, calculated to facilitate European intercourse with the natives, or increase the productive powers of our Eastern Empire. And this meeting especially urges upon the spinners and manufacturers, as well as upon all other interests, directly or indirectly concerned in the cotton trade, to assist in the work of creating that healthy competition among many markets, which alone can obviate the evils arising from our present position of dependence upon one main source of supply."

The committee, in their annual report, say, that their continuous and persistent labors have already resulted in direct benefit to the cotton trade of England, and the prospects of ultimately realizing the great aims

of the Association are daily assuming a more encouraging and hopeful aspect. During the brief period of its existence, the Association has succeeded in making known in all parts of the world the urgent need for increased supplies of cotton, to meet the expanding power of consumption; and has enlisted, both in their own colonies and in foreign countries, a wide range of active and practical support in furtherance of its designs.

The "cotton question" has now ceased to be a local topic, circumscribed within the limits of the trade. Its vast importance, as embracing so many varied interests of capital and labor, and involving the prosperity or decay of more than one-third of British commerce, has drawn around it the support of a large number of the influential journals of the country, has enlisted the advocacy of numerous members of both Houses of Parliament, and obtained for it the assistance of the chief departments of Her Majesty's government.

The resolute determination of the trade, as expressed by the formation of this Association, to be no longer mainly dependent upon one source for its supply of raw cotton, has undoubtedly stimulated the American planter to put forth those extraordinary efforts which have resulted in the enlarged growth of the past year. This result has afforded temporary relief to the trade, and enabled the country to meet the unusual demand for goods and yarn in the Eastern empire and elsewhere. But the committee fear that this unusual and constrained effort may, as in the plentiful year of 1845, in all probability be followed by a serious relapse.

And, if further confirmation be needed, they point to the fact that although in 1840 the crop of the United States was 2,177,835 bales, and in 1860 it reached 4,500,000 bales, the growth has only been doubled in twenty years, while the number of spindles employed in England and on the Continent, in 1840, was 27,266,000, but in 1860, 69,642,000. In other words, while the increase of growth has been doubled, owing to the high prices of an almost exclusive market, the increase of spindles has more than doubled by the enormous addition of 15,110,000, requiring an additional one million bales to give them employment. The position of the trade is, therefore, in 1860, so far as America is concerned, worse by one million bales than it was in the year 1840. But this is not the whole evil. It is estimated "that at least one million bales out of the present crop will class *ordinary or below*," and further, "that the crop has been materially increased by the *quantity of low, trashy and dusty cotton* which planters have thought it their interest to scrape together and send to market. The dangers of our present dependence upon the United States thus grow more apparent every year, and the committee are of opinion that now, in a season of comparative prosperity, it becomes the trade to unite for a few years in the steadfast and needful determination to aid this Association in realizing the brightening prospects that now open before it."

During the past year the correspondence of the committee has been greatly extended. Cotton gins, cotton presses and other machinery have been shipped to Cyprus, Larnaca, Cavalla, Larissa, Latakia, Alexandria and Morocco; to Sierra Leone, Liberia, Cape Coast Castle, Accra, Cameroons, Bulama and the Bijonga Islands, Lagos, Abbeokuta and Benin; to the Governor of Cape Colony and Natal; to Peru, Maracaibo and Ecuador; to Sonsonate, Trinidad, Demerara and Honduras; to the Governor-General of New South Wales and Port Curtis; to the Feejee Islands;

to Batavia and Arracan; to Bombay, Calcutta, Madras, Ahmedabad, Chynepore and Lucknow, in India; in all, 254 cotton gins, besides cotton presses and driving machinery.

Cotton seed, varying in quantities from a few pounds to five tons, have been shipped to Athens, Volo, Latakia and Alexandria; to Madeira, Lagos and Abbeokuta, Benin and the Cameroons; to Cape Colony, Ecuador, Tobago, Jamaica, Trinidad, San Salvador, San Miguel and Sydney, (New South Wales;) to Bombay, Calcutta, Madras and to Batavia, besides various other places; in all, 591 barrels of seed and numerous smaller parcels. Thirteen barrels of guano and one barrel of nitrate of soda have been sent to each of the Chambers of Commerce at Bombay, Calcutta and Madras.

The seed thus distributed has been sufficient for sowing many thousand acres of land, and the committee are in possession of letters received from a great number of their correspondents, which show that hundreds of landed proprietors and farmers have commenced cotton cultivation in numerous regions of the world, and time and encouragement only are required to develop from among these new sources a steady and ample increase to supplies for Europe.

But the committee especially call attention to the fact, that in countries such as India and Africa, where cotton is already grown in great, if not superfluous, abundance, all that is needed is a supply of suitable, inexpensive cotton gins for cleaning, presses for packing, and agencies with capital for the purchase of that cotton. The committee have therefore devoted much labor and attention to these important requirements. They have now succeeded, by the offer of prizes, in obtaining suitable hand-gins adapted to the wants either of the ryot of India or the native African farmer. These gins have been highly appreciated in those countries to which they have been sent. They clean the cotton without injury to the staple, and greatly enhance its value, as compared either with the use of the saw-gin, the Indian churka, or the ruder process of the African, who cleans his cotton either by hand or with the aid of a rude hand-comb. It has been estimated that the extensive introduction of these simple gins among the ryots of India will increase the value of his cotton at least 10 to 15 per cent. This difference, calculated upon the last year's exports from Bombay, would give an aggregate advantage to the ill-paid ryots of India of half a million sterling per annum. The saving in cost of carriage effected by the use of these hand-gins in countries where raw cotton now travels long distances over bad roads, will afford an ample margin to stimulate the growth. The following is a summary of what has been accomplished during the past year by the efforts of the Association:

EUROPE.

Turkey.—In European Turkey, through the influence of Her Majesty's consuls, many of the native cultivators have commenced the cultivation of cotton; but little progress has been made, owing to the existing oppressive system of taxation and official exactions.

Greece.—The Home Minister of Greece has, during the past year, introduced the cultivation of American cotton, from seed sent out by this Association, into the departments of Argolide, Argos, Nauplia, Attica, Livadia, Thebes, Euboea, Scopelos, Chalcis, Ageon, Steron, Caristion, Distion, Erpseon, Caristion, Achaie, Patras, Laconie, Gythion, Trimsee, Boion, Epidaurus, Monombatia.

Cyprus.—In the Island of Cyprus an effort is being made for the cultivation of cotton upon an estate of 80,000 acres of land. A merchant has sent out machinery, at considerable cost, for the cleaning and packing of cotton, the produce of a large quantity of seed supplied to him by the committee.

Asia Minor.—Within the last few weeks Sir MACDONALD STEPHENSON, engaged upon the railway now in progress from Smyrna into the great Valley of the Meander, has tendered his services to the committee, by the distribution of seed among the farmers of Asia Minor, stating that "the resources of the country are almost inexhaustible."

AFRICA.

Egypt.—A report is now in the press, and will shortly be published by the committee, giving the origin, progress and present extent of cotton cultivation in Egypt, with many valuable suggestions as to the means by which the committee may promote an increase of growth in that fertile country, from its present annual average of 100,000 bales to 1,000,000 of bales. Funds for this purpose will be required, and the committee have every confidence that their efforts in this quarter will be zealously seconded by the trade.

Tunis.—The progress of the experiments which were two years since begun in Tunis have been unfortunately checked; but the committee has been assured that His Highness the Bey of Tunis is resolved that no means shall be left untried to render his territory a source of cotton supply. Fully impressed with the great advantages which have accrued to Egypt from cotton agriculture, he is animated with a disposition to give the utmost encouragement to its introduction among his own people.

Madeira.—In the Island of Madeira, and at Bulama, one of the Bijonga Islands, containing 5,000 inhabitants, cotton is being grown.

Sierra Leone.—At Sierra Leone, an English trader is commencing the cultivation, and an intelligent native merchant is introducing cotton gins for cleaning the native cotton, which he will purchase and send to England.

Sherbro.—Her Majesty's Consul of the Sherbro country, lying to the south of Sierra Leone, and also an English merchant at Sherbro, are now engaged in making arrangements for the export of the native African cotton, which may be purchased there in large quantities.

Liberia.—The President of Liberia is taking great interest in the introduction of cotton cultivation among the free colored population of his republic. An agent has been sent through the country calling the attention of the people to the value of cotton as an export. Prizes, consisting of money, medals and cotton gins, have been offered. One farmer has cleared fifty acres for cultivation, and a number of others have also various quantities of land employed in growing cotton. An annual fair is held, at which the products of the country are exhibited and prizes awarded. The committee hope that merchants and others will second these laudable efforts by sending out orders for the purchase of all the cotton which the people of Liberia can raise. Encouragement in their first efforts is needed to create a permanent export cotton trade.

The Gold Coast.—No part of Africa offers a finer opening than this splendid region. The Gold Coast is under British rule. The governor of the colony is deeply interested in the promotion of the growth of cotton, and has promised to aid the efforts of the committee to the utmost

of his power. Two agricultural societies have been formed, one in the eastern district at Cape Coast Castle, and a branch in the western district at Accra. An arrangement has been made with the natives by the government for the payment of the poll-tax in cotton. The Agricultural Society at Accra, in conjunction with a Lancashire firm, are purchasing this cotton at $\frac{1}{4}$ d. per lb., in the seed, and afterwards cleaning and packing it for shipment. Many tons of cotton have been thus accumulated, and several shipments which have reached Liverpool have been sold at 7d. to $7\frac{1}{4}$ d. per lb. An agent has been sent into the interior to advise the people to extend their cultivation, and there is now no doubt that, with the co-operation of the colonial government, an extensive export trade in cotton will spring up. The agent who was sent into the interior reported that in one district alone 70,000 people were already engaged in growing, spinning and weaving cotton. The whole line of the western coast of Africa is studded with towns, many of them containing 100,000 inhabitants, in which regular cotton marts are established, and from which unlimited supplies may be obtained. There are many millions of Africans whose labor may, in this way, be actively employed in the service of the cotton trade, and among whom manufactures would find an inexhaustible market.

Elmina, Benin, Old Calabar and the Cameroons.—At all these places the committee are in communication with traders or missionaries who have been furnished with cotton gins, seed or other assistance in aid of their first efforts.

Lagos, Abbeokuta.—From Lagos the bulk of the present African supplies are obtained; several traders have here entered more largely into the trade, and a considerable amount of machinery for cleaning and packing cotton has been sent out during the past year. During the twelve months preceding March, 1859, 1,800 bales were imported from the west coast of Africa into London and Liverpool; the greater part of which was imported into London. From March, 1859, to March, 1860, nearly 1,600 bales have been imported into Liverpool alone, and 1,847 bales into London. From the West Coast the exports have therefore risen from 1,800 bales, in 1858-9, to 3,447 bales in 1859-60, or nearly one hundred per cent. in twelve months.

A treaty has been negotiated with the chiefs of Abbeokuta, by an exploring expedition connected with the African Civilization Society of New-York, for the allotment of lands to be devoted to cotton cultivation, by a colony of free colored people from the United States. They will commence with a farm of 500 acres. A company is in course of formation to assist this movement—one gentleman in London offering to take £2,000 worth of shares. This project opens a new feature, by the introduction of Africans, trained to the system of cotton cultivation in the United States, and may ultimately exercise immense influence upon the destinies of the native population as a means for the suppression of the slave trade.

The River Niger.—The committee have had their attention directed to the importance of encouraging the establishment of trading stations along the banks of this river. They have memorialized Her Majesty's government on the subject of giving effectual protection to traders. A cotton trade is about to be established at Onitsha, under the auspices of an industrial institution in London. Sample bales of cotton have been re-

ceived from Onitsha and from Rabba, valued from 6d. to 8d. per lb.; and it is affirmed by Dr. BAIKIE and Lieut. GLOVER, of the Niger Expedition, and also by Mr. MCGREGOR LAIRD, of the African Steamship Company, that immense quantities of this cotton may be bought in the seed at $\frac{1}{2}$ d. per lb., or at 2d. to 3d., ready cleaned. The committee feel justified in asserting that great progress has been already made along the entire west coast of Africa, in extending and giving permanence to the cotton culture and export of these extensive regions.

Angola.—This country, situated more to the southwest of Africa, possesses great natural advantages for a large export cotton trade. It is under Portuguese government; but it has been found, from the import of twenty-six bales by a firm who are members of this Association, who made a trial shipment, that at present the means of communication with this country are too infrequent and costly to render it profitable. The Portuguese are, however, likely to import considerable supplies from this quarter into Lisbon for their own consumption, and they are making efforts in this direction. This will again relieve the Liverpool market to a certain extent from the demand for Portuguese consumption.

Natal.—The government of Natal has during the past year ordered a considerable supply of seed for distribution among the Zulus under British rule; and steps have been taken to arrange the payment of the *hut tax* in cotton. Numerous farmers have begun to grow cotton from seed sent by this Association, and one proprietor has cultivated cotton on a fair scale. A sample bale sent by him was sold on his behalf by the committee, worth 9d. per lb. In one of his letters he reports that he had already 100,000 lbs. of cotton on hand, which he was preparing for shipment to England. The committee are of opinion that Natal offers eminent advantages as a cotton-growing country, and they are desirous of doing all in their power to aid in their development.

Cape Colony.—The Grahamstown Agricultural Society have applied to the committee for cotton seed, which is now being sent out. They state that "Wheat is ill-adapted for growth in this colony, being liable to attacks of *rust*. This year the crops have been destroyed by that disease. Many farmers are hence looking out anxiously for some less precarious method of employing their capital and skill, and cotton seems of all other things the most promising. Some years ago cotton was tried with excellent results, but an irruption of the Kaffirs put an end to the attempt."

The discoveries of Dr. LIVINGSTONE have prompted a movement, in conjunction with the Oxford and Cambridge Mission, for establishing a European colony in the valley of the Shire, a branch of the River Zambezi. An industrial department connected with this mission will send out agricultural implements with machinery suited for cotton cultivation, cleaning and packing, and there is every reason to hope that great results will accrue from this movement, providing the experiment is judiciously and energetically carried out. LYONS MCLEOD, Esq., lately Her Majesty's consul at Mozambique, reports that he has seen cotton abundantly grown at Inhambane, and numerous other parts of the East Coast of Africa, as far north as Mozambique.

THE WEST INDIES AND AMERICA.

Cuba.—At Havana, an Anglo-Spanish Cotton Company, capital four

million dollars, has been established for the extension of cotton cultivation in Cuba.

Jamaica.—The British Cotton Company are steadily pursuing their initial experiment, and, as we are informed, with the most gratifying results, both as to the quality of cotton which has been raised, and as to benefit to the shareholders. It is thought that ere long this company will receive that support in Lancashire that will enable it extensively to widen its basis of operations. As the first company started in this country it deserves the special attention and encouragement of the trade.

Tobago—Barbadoes.—Several land-owners in these islands have planted areas of a few acres each.

British Honduras and Guatemala.—Experiments are being made in both these countries to introduce the cultivation among the people.

Peru.—In the north of Peru the proprietor of an extensive estate has let out portions of land to four cotton-growing companies, three of which are raising 200,000 plants each, and one 100,000 plants, in all 700,000. The estate is capable of growing at least 14,000,000 cotton plants. A large number of small farmers in the same district are also stated to be growing cotton on portions of their farms to a greater or less extent. Two landed proprietors, also in the province of Chiclayo, have begun to grow cotton; one of whom has recently visited this country to purchase machinery for a cotton plantation in Peru, and he has engaged a ship-load of two hundred and fifty Spanish emigrants, who have set sail for that country, where they will be solely employed in the raising of cotton and its preparation for export. He has constructed a canal, thirty-nine miles in length, to convey water from the Andes to his estate, for the purpose of irrigating his lands. This canal was begun about three years ago, without any idea of cotton cultivation. The operations of the Association having come to his knowledge, and finding that the soil is splendidly adapted for cotton planting, they are going into the cultivation with good earnest.

Venezuela—New-Granada.—The committee have furnished machinery and cotton seed to be employed at Maracaibo, Baranquilla and Sabinilla, where effort is being made to promote the growth and export of cotton, with fair prospect of success.

British Guiana.—In Demerara a missionary of the Church of England has recently been supplied with cotton seed, which he will distribute among the resident farmers. He purposes making a tour and lecturing in different towns and villages on the advantage of cotton cultivation.

EAST INDIES, AUSTRALIA, CEYLON, &c.

Batavia.—A member of the committee has received information that an extensive proprietor in Batavia has a large extent of land under cultivation. From New-Orleans seed he has raised a crop of 272,000 lbs. of cotton, and from Palembang seed nearly 1,000,000 lbs. Arrangements have been made by this proprietor with the laborers on his estate to continue the cultivation for five years. The land is well suited to the plant, and as the natives find the cultivation profitable, they have planted largely.

Java.—Cotton seed has been supplied by the committee for planting on an estate in this island.

The Feejee Islands.—The committee have received through the Foreign Office five descriptions of indigenous cotton which are reported by Con-

sul PRITCHARD to grow wild in these islands. The plant yields without intermission for ten, twelve or fifteen years. The values of the several samples are 7d., 7½d., 8d., 9d., 11d., 1s. and 1s. 0½d. per lb. About 80 to 100 of these islands are inhabited, the total population being 200,000, 50,000 of whom have been converted to Christianity. One-half the area of one of these islands would grow three to four millions of bales of cotton. In view of these facts, and being informed that an offer had been made by the native king and chiefs of the cession of these islands to the British Crown, the committee felt it to be their duty to represent to Her Majesty's government the suitability of the native Feejee cotton to the wants of the trade. The question of annexation was one into which it was not in the province of the committee to enter. It was nevertheless their obvious duty in the interest of the cotton trade, and in view of a faithful discharge of their duty as your executive, to see that a just representation should be made of the utility of such an addition to our sources of supply. From no single quarter of the world has such a collection of graduated qualities been received.

Australia.—To Sir WILLIAM DENISON, the Governor-General of New South Wales, and also to Sir GEORGE BOWEN, the Governor of Queensland, the best thanks of this Association are due for the zealous and active interest they have taken in furtherance of the objects of this Association. A considerable quantity of cotton seed, with cotton gins, have been forwarded to Sir WILLIAM DENISON, at Sydney, who has taken steps for the distribution of the seed among the farmers. More than fifty settlers have been supplied with seed, and one gentleman of large property has disposed of a quantity of seed among the tenants on his estates, to whom, aided by the women and children of their families, it is expected the cultivation will be profitable. Several bales of Sea Island cotton have been received from Australia by the committee during the past year, which have sold from 1s. 8d. to 2s. per lb. One settler at Port Curtis, writing to an Australian paper, says: "I think I shall have this year cotton enough to plant 1,000 to 1,500 acres." A sample of his cotton has been valued in Manchester at 3s. per lb.

Accompanying a copy of a despatch just received from Sir GEORGE BOWEN, on the subject of cotton cultivation, the committee have received a copy of a prospectus of a company now formed for the growth of cotton in Queensland. This company will commence operations upon one hundred acres of land.

A landed proprietor from Australia is now in this country endeavoring to form a company to commence with the cultivation of 1,000 acres of land. He is prepared to place 1,000 acres of his own estates at the disposal of such a company, and to become a large shareholder in the undertaking. He has already sufficient labor upon his land for the cultivation of 1,000 acres, together with suitable buildings and steam power. The rent he proposes to take out of the profits of the company. There are ten to twenty millions of acres of land suited to the growth of cotton in that part of Australia where he proposes to commence operations. He has already grown both Sea Island and New-Orleans cotton upon his estates; and the land, which has a depth of soil of twenty feet, will grow 600 lbs. of clean cotton to the acre. Should this scheme prove successful, and only one-third of our emigration be annually diverted to the Australian cotton fields, England would soon be placed in safety as to her sources of supply of cotton. The committee cannot but regard such

efforts with great interest, and they will be prepared to render their utmost aid within the limits of the rules of this Association to every well-considered and practicable scheme, having for its object the establishment of cotton-growing in Her Majesty's colonies.

Ceylon.—The Kandy Agricultural Society are endeavoring to extend the cultivation of cotton in this island, and have made application to the governor, Sir H. G. WARD, to encourage the inhabitants favorable to its growth, by granting them permission to pay for a certain period a portion of their taxation in cotton. The committee are informed by the Kandy Agricultural Society that "there are thousands of acres well adapted for cotton cultivation," and they trust hereafter to report that the culture has been extensively entered upon.

Pegu.—The attention of the committee has recently been drawn to an entirely new cotton field, by Captain RICHARD SPRYE. This gentleman advocates the opening of a new line of overland communication with the interior of China. He proposes the construction of a *cheap single line of railway for commerce* from Rangoon or Negrais, in the Bay of Bengal, through Her Majesty's territory of Pegu, and thence through a portion of the Burmese Territory to Esmok, in the Chinese province of Yunna. Rangoon is distant from Esmok 500 miles. The southern provinces of China are densely peopled, and abound with most valuable raw products. Situated 3,200 miles from Peking, the people are more free and open to foreign intercourse than the more exclusive populations of the north. They offer, therefore, an enormous market for British manufactures. The soils of Pegu and Burmah are admirably adapted to the growth of cotton. Captain SPRYE states that "when Dacca was in times past the great muslin-making place of the East, considerable quantities were sent from Burmah to that city, for the manufacture of those exquisitely fine muslins which were formerly made there;" and that, "under proper cultivation, with such a soil and climate, adapted to the growth of cotton, his belief is that Pegu, Burmah, and the adjacent Shan territories east of them, could produce annually *all the raw cotton* that England requires, and the whole of superior quality." The Chinese at the present time employ caravans, numbering 40,000 ponies, for carrying on trade with these regions. A railway, such as Captain SPRYE describes, would at once open a considerable source for the supply of cotton. Through its terminus, at Esmok, British merchandise would gain ready access to that vast network of water communication which intersects China, and in lineal extent reaches 15,000 miles. The opening of such a commercial artery into China, with her four hundred millions of population, would be a great gain for our manufactures; and if at the same time so ample a cotton-growing region could be laid under contribution, Captain SPRYE's scheme would be worthy of immediate adoption by capitalists, as a hopeful source of gain.

India.—Among the numerous regions to which the attention of the committee has been directed, none have presented so vast or hopeful a field for their labors as that of India; and while the difficulties they have had to encounter have been of more than ordinary magnitude, the success they have met with has proved the most encouraging for perseverance. The Chambers of Commerce of Bombay, Calcutta and Madras, and the Agri-Horticultural Society at Calcutta, have alike rendered invaluable aid to the operations of the committee, and to whom the best thanks of the Association are justly due.

AVERAGE QUANTITY OF COTTON EXPORTED INTO GREAT BRITAIN IN EACH FIVE YEARS, WITH THE TOTAL IMPORT OF ALL DESCRIPTIONS OF COTTON, AND THE AVERAGE PRICE OF BOWED COTTON FOR THE SAME PERIOD.

YEARS.	American Average.	Incr. p. ct. p. ct.	Brasili- an Average.	Incr. p. ct. p. ct.	Egypt- ian Average.	Incr. p. ct. p. ct.	East Indian Average.	Incr. p. ct. p. ct.	West Indian Average.	Total Imports.	Incr. p. ct. p. ct.	Dec. p. ct. p. ct.	Aver- age Price.	YEARS.
From To	Bales.		Bales.		Bales.		Bales.		Bales.	Ba.			d.	From To
1800-5,	105,813	..	65,115	..	..	..	7,797	..	76,875	58,340,000	..	..	19	1800-5
1805-10,	148,183	40	81,026	24	..	..	29,371	282	84,459	81,200,000	39	..	20	1805-10
1810-15,	102,629	..	119,274	47	..	..	10,817	..	66,060	73,000,000	..	11	21	1810-15
1815-20,	216,176	110	141,198	18	..	..	128,148	1,100	41,509	187,940,000	89	..	18	1815-20
1820-25,	357,666	65	149,291	6	..	..	89,817	..	38,071	165,080,000	20	..	9	1820-25
1825-30,	513,724	44	188,813	..	7	..	67,760	70	19,964	229,080,000	39	..	6	1825-30
1830-35,	677,833	32	188,657	..	26,889	..	97,565	45	14,742	310,960,000	35	..	8	1830-35
1835-40,	957,264	41	117,564	..	34,869	30	142,055	72	29,999	458,400,000	47	..	7	1835-40
1840-45,	1,211,840	27	100,640	..	51,560	48	220,780	85	18,840	609,220,000	33	..	5	1840-45
1845-50,	1,168,680	..	126,000	25	..	..	197,980	..	7,820	614,340,000	1	..	5	1845-50
1850-55,	1,600,840	37	125,380	..	111,720	113	348,000	76	9,180	875,060,000	42	..	5	1850-55
1855-59,	1,797,465	12	130,400	4	..	..	503,800	45	9,000	1,058,400,000	20	..	6	1855-59

From this we may trace the supply of cotton from each source, and the comparative relation of one to the other. As late as the year 1820, the imports of cotton from other countries than America exceeded the latter by 43 $\frac{1}{2}$ per cent.; after that date America took the lead, gradually advancing over the collective supply from all other parts of the globe, until the excess of American reached 209 $\frac{1}{2}$ per cent. in 1840-45. But since that period she has evidently been most seriously losing ground, and the nearer we come in the consideration of this question to the present day, the more important is its bearing upon the present position and future prospects. It will be seen, that in the five years ending 1850, the imports of American cotton actually show a decrease of 43,000 bales as compared with five years ending 1845, and that from all other sources there was also a decrease. In the five years ending 1850-55, over 1845-50, there was an average increase in the exports from America of 439,000 bales; but in that period, as compared with the preceding five years, an increase took place in the imports of manufactured cotton goods of 497,454,000 yards, and of 403,400 bales of raw cotton, together equal to 652,127 bales of cotton, or fully one-third more than the increase in the exports from America; fortunately for the trade, England has received in the latter period an increase from other countries of 210,000 bales.

COTTONIZED FLAX—FIBRILIA.

I. THE IMPORTANCE OF RECENT DISCOVERIES TO THE WORLD.—II. LYMAN'S NEW PROCESS.—
 III. THE ADAPTATION OF FLAX AS A PAPER STOCK.

WE alluded in our May number to the highly important material now brought to light as cottonized flax. Of this there are several specimens, in various degrees of finish, at the New-York Chamber of Commerce, for exhibition.

Among the processes recently applied to the disintegration of flax, hemp and other fibrous plants, and the preparation of the product for textile purposes, the most efficacious, and by far the most economical, is that discovered by Mr. A. S. LYMAN, of New-York, and lately patented in several European countries and India, as well as in the United States. The principle of this invention consists in a highly ingenious application of the explosive power of steam to the separation of the fibers of all vegetable materials. In all fibrous plants, such as flax, hemp, cane, &c., when freshly cut, sap, or, if dry, after being soaked a short time, moisture is found to be minutely distributed throughout the entire structure of the plant. This simple element it is which is converted into an agency of immense but easily regulated power, for the complete disintegration of fibrous plants of any and every description. The *modus operandi* consists in the use of a strong iron cylinder, say twelve inches in diameter and 24 feet long, having a valve at either end, carried by an arm moving on a centre, so that the end of the cylinder can be thrown open to its full area. This cylinder being more than half filled with flax or hemp recently cut, or charged with moisture by being soaked for a brief period, the valves at the ends of the cylinder are closed, being made steam-tight, and, by means of a pipe from a boiler, steam is supplied to the cylinder of any required pressure to the square inch. In a few minutes the moisture in the hemp or flax is raised to a temperature above that requisite for becoming steam, but it cannot be converted into steam, being controlled by the pressure of the steam which already fills the whole available space for steam within the cylinder; the valve at the mouth of the cylinder being now let loose, the confined material is discharged from it with a loud explosion, and being suddenly projected from the cylinder, where it was under a pressure of 200 lbs., into the atmosphere at a pressure of only 15 lbs. to the square inch, the heated moisture within the fibrous material instantaneously flashes into steam, rending and disintegrating the material as completely and minutely as the moisture was distributed throughout its fibrous structure.

In the case of flax and hemp it is found that this process of blowing separates in the most complete manner the fiber from the shive or woody portion of the plant, from which it is then freed by being passed through an ordinary burring mill; and being afterwards washed in a mild alkaline solution, it can be carded and used in combination with either wool or cotton, or both, and as well for felting as for spinning purposes. In this condition the fiber, thus simply and inexpensively prepared, is applicable to many valuable uses—taking the place of wool with equal utility and at not more than one-third of its cost—and of cotton, in those fabrics in

which it is combined with other textile substances, with equal advantage and at a very large reduction on the cost of cotton. When, however, the flax fiber is subjected to a second blowing process, it is found to be minutely subdivided in a natural manner into its ultimate or component fibers, which are ascertained to be of the length of from one and a half to two inches. By means of a simple and economical process, applied by the inventor, the comminuted fiber is bleached, any remaining gum is removed, and it is reduced to a condition in which it can be made capable of being spun alone, in the same manner as cotton. Although experiments on a large scale, in this respect, have not yet been made, there remains little doubt that, with some slight modifications of machinery, which experience and ingenuity will easily supply, this cottonized flax can and will be used and spun by itself, in the same manner as ordinary cotton, while by this process it can be manufactured at half the cost of cotton.

For textile and felting purposes, in combination with wool and cotton, or with both, and especially as a substitute for wool, its value and great economy are already established, and for all such combination purposes it cannot fail henceforth to come into extensive use. Specimens of felted cloth, half wool and half flax; of stockings in the like proportions; of felt hats, one-third flax and two-thirds wool, and other fabrics are exhibited. Thread or spun goods cloth are being made, all of which articles manufacturers pronounce to be improved by the admixture of flax, but, as first samples, are greatly inferior in quality, they say, to what will be produced.

One peculiar advantage of the LYMAN process is, that by means of it no single particle of the fiber is wasted or becomes refuse; but every part is equally valuable for the highest uses. By this process, moreover, the fiber of hemp can be made equally available with flax; and it is specially adapted to the treatment of jute and numerous other fibrous plants in like manner.

The first application of this most ingenious invention has been to the disintegration of fibrous material, and its conversion into paper stock, for which uses it bids fair to supersede, in economy of production, any existing agency. In the treatment of the hemp plant for this purpose its results are most striking. But its future value to the manufacturing community will be chiefly in the economical preparation of flax for textile purposes. To the agriculturist it presents a powerful inducement for turning to profitable account the vast area of western lands specially adapted to the growth of flax and hemp; while it furnishes facilities for utilizing the many thousands of tons of flax straw which heretofore have been, and still are, left as useless to rot upon the ground, after the removal of the seed.

The cost of the apparatus for working LYMAN's process is very considerable, when contrasted with its produce; while hardly any skilled labor is required. A battery of three guns, of the contents of forty cubic feet each gun, with steam boiler, tubing, &c., can be set up for a cost in all not exceeding \$8,000. In Illinois and Ohio, whose soil is specially adapted to the culture of flax and hemp, coal costs not more than two, in many places but one dollar per ton. The shove or boon of the flax will furnish a large portion of the fuel for working flax. Farmers in Illinois will contract to deliver hemp, with the seed on it, at \$5, or before the seed ripens, at \$3 to \$4 per ton; and flax can be had abun-

dantly, we learn, at \$6 the ton. In the use of hemp for paper stock the woody part or shive is equally valuable with the fiber; and from accurate trials made it is ascertained that a ton of hemp of 2,000 lbs. will yield 56 per cent., or 1,120 lbs. of bleached paper stock. Each gun is capable of blowing 14,000 lbs. of hemp, producing 7,840 lbs. bleached fiber per day of 20 hours.

Of flax it is found that one ton of 2,240 lbs. yields 324 lbs. of pure bleached fiber, and a large proportion of material for fuel. Hemp or flax requires to be in the gun only from five to six minutes, and two minutes suffice for loading. This admits of eight and a half charges per hour; seven may be safely counted on.

From results already obtained a bleached paper stock, from hemp, ready to be run off into paper, can be produced at a cost not exceeding three cents per lb., worth fully seven or eight cents, and which can, at a further cost of not more than one cent, be converted into paper of different qualities, worth, on an average, not less than twelve cents the lb. The manufacture already, to a considerable extent, of paper from the cane reed, shows results nearly if not equally as promising as those from hemp. It is, however, in the application of the process in question to the preparation of flax, hemp and other fibrous plants for textile purposes, as a substitute for or supplement to cotton and wool, that it is, at the present time, especially interesting. The LYMAN process, at once simple and economical, and acting on fibrous plants in a manner peculiar to their natural construction, by one stroke, supersedes the laborious, tedious and expensive processes of disintegration heretofore in use. It is this which gives to it its peculiar character and value; and destines it to fill a highly important function in the economy of one of the most valuable and essential branches of human industry.

In view of the lamentable political disturbances which now agitate this country, and of their disastrous consequences to the manufacturing industry of Europe as well as America, it is not easy to over-estimate the importance of the application of such inventions as the one in question to the development of a substitute for cotton. The uncertainty of the duration of the impending civil war which already carries dismay to many a humble home on the other as well as on this side of the Atlantic, and the prospect of a very great diminution, or indefinite interruption of the supply of an article of such prime necessity as cotton, furnish the most powerful stimulus to the discovery no less of other sources of supply, than of some other suitable textile material which may serve as a substitute for it.

Let it be remembered that cotton owes its vaunted sovereignty as much to the ingenuity of WHITNEY, as to the peculiar fertility of Southern soils. Contrast its history since the discovery of the cotton gin with that of the preceding period, and the extent of its obligation to that invention is manifest. It requires but the application of mechanical ingenuity to the treatment of flax, a plant indigenous to almost every soil and climate, to adapt it to all the practical utilities of the cotton plant. This *desideratum* we believe to be substantially supplied by the simple and efficacious invention of Mr. LYMAN; and it can hardly be doubted that in an age remarkable for mechanical ingenuity, any requisite supplementary appliances will be forthcoming in the progress of this new and most interesting branch of industry.

ANCIENT COMMERCIAL CITIES OF THE LOW COUNTRIES.

By E. HASKET DREBY, of Boston.

THE cities of Flanders and Holland had risen by commerce and manufactures to opulence and splendor when the greater part of Europe was immersed in barbarism. Elegant structures for city halls, palaces and bourses still exist which were erected before the United States were planted. Structures alike remarkable for their material and architecture, built at a period when the buildings in Great Britain, with the exception of the castles of the nobility and religious edifices, were composed of frame work filled in with clay, and often thatched with straw.

A large portion of these populous districts had been fenced in and reclaimed from the German Ocean, and their soil cultivated until it became a garden. Here were collected the whale oil and herrings of the North Sea, the wheat, furs, lumber and naval stores of the Baltic, the wine and salt of France, the wool and tin of Great Britain, the silks of Italy and the spices of the East.

Navigation was conducted by short summer voyages, and Flanders was a convenient resting place between the Baltic and Mediterranean.

Before the route around the Cape of Good Hope was opened, the spices and luxuries of India were imported into Flanders from the eastern shores of the Mediterranean. These were enhanced in value by two tedious voyages and one or more journeys by land, and the profits and risks of several adventures. Some idea of the risks, expenses and profits of these undertakings may be formed from the following table of the cost of invoices of East Indian commodities landed in the commercial cities of Flanders just after the opening of the East Indian trade around the Cape of Good Hope :

IMPORTS.

600,000 lbs.	pepper reduced from 2s.	at Aleppo to	2½d. in India.
450,000 "	cloves " " 4s. 9d.	"	9d. "
1,000,000 "	raw silk " " 12s.	"	8s. "
400,000 "	nutmegs " " 2s. 4d.	"	4d. "
350,000 "	indigo " " 4s. 4d.	"	1s. 2d. "
150,000 "	mace " " 4s. 9d.	"	8d. "

Or,

£ 1,465,000 reduced to £ 511,458.

Under a mild form of government the Flemish provinces embarked early in commerce, established an extensive fishery for herring on the coast of England, opened the whale fishery, built ships and established marts of commerce. Since the palmy days of this commerce, these States have been the seat of devastating wars. There has been a fierce struggle between the Inquisition and the Protestant faith; opulent cities have been besieged and taken; dykes have been broken and the ocean admitted to drown the invader; harbors have been closed and new ports and marts have risen to distinction; but commerce and wealth have left lasting memorials which have survived intolerance and oppression, and do not fail to interest the modern traveller.

BRUGES.

Bruges had become an important city as early as the seventh century, and became still more conspicuous under **CHARLEMAGNE**.

From the ninth to the fifteenth century it was the capital and residence of the counts of Flanders, who allowed their subjects great privileges and very liberal institutions, and the restless spirit of freedom distinguished the Flemings.

During the days of chivalry it attained to great opulence and splendor. So rich had it grown under the counts of Flanders, that one of its merchants became security for the ransom of the last count of the race in the sum of 400,000 crowns.

From these counts it passed to the Duke of Burgundy, and contributed largely to the wealth of its sovereign, the splendor of whose court surpassed that of all Europe at that period. When the queen of **PHILLIP LE BEL**, of France, visited Bruges, she reported that she found there hundreds of ladies looking more like queens than herself.

Here was instituted the order of the Golden Fleece, which derived its name from the great staple of manufactures and commerce. In 1385 Bruges was at the zenith of its fame; it had attracted mercantile firms from Lubeck, Hamburg, Bremen, Cologne and Dantzic, from England, Holland, Denmark, Sweden, France, Portugal and Spain, and became the emporium of English trade, and the centre of the commerce of Christendom; connected with Ostend by a ship canal, navigable by vessels of the largest class, and having Sluys for a harbor, located a sufficient distance from the sea to avoid the inroads of the Danes and Normans; it became the entrepot of the herring fishery and the seat of the manufacture of carpeting and linen, and more renowned for its wealth than any city which had preceded it in Northern Europe.

Its prosperity ended with its transfer to Austria, to which it passed upon the marriage of **MARY**, the heiress of the Duke **CHARLES**, with the Duke **MAXIMILIAN**.

Having revolted from him in 1482, upon his refusal to grant it the guardianship of his son, its port of Sluys was closed by its Austrian master; its commerce at once declined and was soon transferred to the rising city of Antwerp.

During its prosperous days the Italians sent silks and spices here in large vessels. But the vessels in general use were of less size and value, for in 1470 seven Spanish vessels bound to this port were taken and carried into England. Their tonnage varied from 40 to 120 tons, and they were valued at thirty shillings per ton, from which we may form some idea of the value of money at this period.

If we may judge from a treaty concluded in 1470, between the Arch Duke of Austria and **EDWARD IV.** of England, his subjects had begun to display that sharpness in trade which they still occasionally exhibit; for the 12th article of the treaty provides that the English companies shall not direct their agents at the great fairs to defer the purchase of goods of the Netherlands until the close of the market, when the Netherlanders, in their anxiety to get home, sell out at a reduced price, of which there had been great complaint in previous years. Article 13th provides, also, that they shall discontinue the practice of buying by the king's beam and

selling by private weights, which last we presume sometimes fell a little below the standard.

Bruges was almost destroyed by the cruel Duke of ALVA, but its canals and island quays, its fifty-four bridges, many of its public edifices and stately warehouses still remain to attest its ancient grandeur, although its population has dwindled to less than 50,000.

GHENT—*German*, GENT—*English*, GLOVE.

This very ancient city still contains 90,000 people, and is nearly eight miles in circuit, although many fields and gardens are within the area. It was the birth place of CHARLES V., and in former times so much larger than the capital of France that CHARLES used to say he could put Paris in his glove.

It was also the birth place of JOHN of Gaunt, SHAKESPEARE's time-honored LANCASTER, the son of EDWARD III. of England.

Although an inland city, distant twenty miles from the sea, it was situated on the Lys and near the Scheldt, navigable to the sea, and, like Venice, divided into many islands, most of which have magnificent quays.

It contained seventy bridges and an immense cathedral, lined with black marble, and sustained and embellished by pillars of white Italian marble. It contained, also, many magnificent warehouses and public and private edifices, some of which are still standing.

Its cathedral dates back to 1228, and the Grand Beguinage, held by 600 recluses or nuns, who are not bound by any vow of seclusion, and devote themselves to the sick and needy, originated in 1234.

Flanders was at this early day traversed by many canals, and Ghent, by its ship canal to the Scheldt, was accessible to ships drawing 18 feet of water. Ghent was celebrated for its manufactures of cloth, linen and muslins.

In the sixteenth century it is reported to have held 175,000 people, and VOLTAIRE states in his history of Europe that in 1468 there were in Ghent 50,000 artisans.

Even in modern times, while annexed to France, NAPOLEON regarded it as the third manufacturing city in his empire, ranking next to Lyons and Rouen.

Ghent passed, with Bruges and the fertile and rich counties of Flanders, to Burgundy and to Austria, and suffered from the successive wars which desolated the Garden of Europe. Having enjoyed great freedom under the mild sway of the counts of Flanders, it was restless under its new arbitrary and less intelligent masters.

In 1839 it was taken after a revolt by CHARLES V. Again, in 1678, it was captured by LOUIS XIV., afterwards, in 1706, by the Duke of Marlborough, and finally, in 1796, by the revolutionary armies of France. It is remarkable that so much of its commerce and manufactures, and so many elegant structures as still exist, should have survived its misfortunes.

As illustrative of its former commerce we may add, that in 1468 no less than one hundred and fifty vessels arrived in a single day at its port of Sluys.

No city in Christendom, says ERASMUS, was to be compared to Ghent for extent, constitution, or the culture of its artisans.

Its drawbridges were raised daily, and bells rung to suspend business while the armies of artisans went to and from their labors. It was surrounded by walls whose circuit was nine miles, and could bring into the field more than 60,000 soldiers. It was a republic in all but name.

BRUSSELS.

Brussels, one of the most ancient cities of the Province of Brabant, and now the capital of Belgium, forms an amphitheatre upon the bank of the Senne, a mere rivulet of thirty feet in width.

This flourishing inland city still retains an hundred thousand inhabitants and several cathedrals, which were erected in the eleventh and twelfth centuries, and the city itself was founded as early as the seventh century.

It grew under popular institutions. As early as the thirteenth century it adopted the trial by jury.

It flourished under the Duke of BURGUNDY, and under various sovereigns has been embellished by magnificent churches, hospitals, a savings bank with large deposits, boulevards, canals and railways, a theatre, college, academy, picture-gallery and observatory.

It was once distinguished for its manufactures, but was checked in its prosperity by the Duke of ALVA.

In 1695 it was bombarded by Marshal VILLEROY.

" 1706 " taken by the Duke of MARLBOROUGH.

" 1746 " " Marshal SAXE.

" 1794 " " France.

LIEGE.

In the seventh century Liege was known as the village of Legia, lying on the navigable waters of the Maese, and near the centre of a coal field fifteen miles in length and five in width; it soon began to expand, and, erecting a cathedral in the eighth century, became a bishopric.

As it continued to expand its bishops became princes. Its burghers, however, were always imbued with an intense love for their popular institutions, under which they grew and prospered until its population, in the fifteenth century, rose to 120,000, from which it gradually declined, under a less liberal government and successive wars, to one-half that number in 1838, but is now gradually recovering under the constitutional government of the King of Belgium.

Liege has been distinguished for its extensive coal trade and manufacture of iron, copper, alum and sulphur, and for many years has annually produced two hundred thousand muskets, fowling-pieces and other fire-arms, and five hundred pieces of cannon. It is, in fact, one of the chief arsenals of Europe.

In modern times the ancient palace of the Prince Bishops has been devoted to the manufacture of steam engines, by Messrs. COCKERELL, of England, who employed there sixty steam-engines and twenty-two

hundred operators. A strange transition, from the elegant and festive entertainments of the founders of the palace.

Liege is connected with the great canal and railway system of Belgium, and the banks of the Maese are lined by a commodious quay for the vessels which navigate that river.

In 1408 Liege was taken by CHARLES the Bold of Burgundy, and in modern times has been annexed to Belgium.

LISLE OR LILLE.

This city, once a part of Flanders, was founded A. D. 640, and flourished under the liberal sway of the counts of Flanders, who seem to have early discovered that commerce, manufactures and wealth were best promoted by liberal charters, and to have allowed their growing cities to establish systems of self-government.

Lisle had risen to great importance, when it was besieged and taken in 1667 by LOUIS XIV., and annexed to France. After a lapse of forty-one years it was recaptured from France by the Duke of MARLBOROUGH, but at the treaty of peace reverted to France, and remains one of the few permanent acquisitions from the costly wars of her great monarch.

In 1836 Lisle contained 72,000 people. Its ancient manufacture of laces, velvets, serges and linen still survive, and to these have been added cotton and beet sugar.

It has an active commerce by canal and railway.

LOUVAIN.

This city, which now forms a portion of Belgium, was in ancient times a celebrated city of Brabant, and subsequently of Burgundy. During the fourteenth century its manufactures of linen and wool rose to such a height of prosperity that it is reported to have held 150,000 artisans; and although this tradition has been questioned, the great extent of its ramparts, now converted into boulevards seven miles in circuit, attest its former grandeur. It is accessible to vessels of 150 tons burthen, by a canal which communicates with the Scheldt, and contains an university of great celebrity, to which are attached no less than forty colleges. Having revolted from the Duke of BRABANT, near the close of the fourteenth century, it sustained losses from which it has never recovered.

ANTWERP—ANVERS.

In 1444, while PHILIP the Good was Duke of Burgundy, an English company of merchants, under the name of the English nation, removed from Middleburg to Antwerp. It possessed then but six small vessels, all engaged in the navigation of the Scheldt; but, under the impulse given by this large body of merchants, houses rose in value, navigation increased, and the rising city soon expanded its commerce and manufactures, and when CHARLES the Bold succeeded PHILIP, Burgundy had become a match for France, both from its vast trade in linens and woollens, the extent of its populous and fertile country, and the growth of Bruges, Ghent and Antwerp.

In 1504 the city of Antwerp had acquired great celebrity from its free fairs, each of which lasted six weeks, attracted merchants from all parts of Christendom, who came there with their goods, custom free.

Portugal sent also to this mart, as to a midway station, the spices and drugs of the Indies. It grew, also, upon the decay of Bruges, after the closing of its port; having, at low tide, a depth of thirty-two feet of water and easy navigation to the sea.

In 1514 it was encircled by a new wall, in consequence of its growth.

In 1518 six Venetian galleasses, laden with drugs and spices, arrived there to supply a single fair.

The religious persecution in Germany under CHARLES V., the intolerance of HENRY II., in France, and of MARY, in England, forced many enterprising merchants and skilled artisans to leave their homes, and led them to settle in Antwerp. A liberal policy drew thither a concourse of merchants from all parts of Europe.

In 1550, history informs us that a house in Channel Row, Westminster, London, within the precincts of the court of EDWARD VI., rented to the comptroller of the king's household for the low rate of thirty shillings per annum, in consequence of the small commerce and manufactures of England. In the same year four thousand houses were erected in Antwerp, upon the decision of CHARLES V. not to introduce the Inquisition into that city; he was deterred from doing this because the English merchant adventurers, who employed 20,000 people in Antwerp and 30,000 more in other parts of the Netherlands, threatened that they would leave the country. At this time Antwerp was in its zenith. The Scheldt often contained 2,500 vessels; its exchange, still standing a few years since, often contained 5,000 merchants, one of whom is reputed to have entertained CHARLES V. by burning his bond in a fire of cinnamon, and another to have expended 130,000 gold crowns upon a banquet to PHILIP II. Antwerp surpassed all the cities of Europe, except Paris, in wealth and power, and had become the mart of the North, if not of Christendom.

The historian GUICCIARDINI, in his description of Antwerp and the Netherlands, in 1560, observes, that here are resident merchants of Germany and Denmark, the Easterlings, Italians and Portuguese. They meet here each day, at the English bourse, and twice at the new bourse, and deal there for bills of exchange or deposits and loans, at 12 per cent. FUGGER, one of these foreign merchants, died there, worth six millions of crowns; many were worth 200,000 to 400,000 crowns.

Such merchants gave long credits to Italy and Spain, and drove the English and other foreigners out of the trade. They imported also large quantities of grain, metals, timber, naval stores, salted meats and amber, from Denmark, Sweden, Eastland and Poland.

From Germany they drew copper, wool, glass, quicksilver, and 40,000 tuns of Rhenish wines, together worth two millions of crowns.

From England they imported wool worth 250,000 crowns, and 200,000 pieces of drapery, worth, unfinished, twelve millions of crowns.

From Italy they received, in gold and silver thread, silks, camlets and other stuffs, goods to the amount of three millions of crowns.

France sent to Antwerp 40,000 tuns of wine, worth 1,000,000 of crowns, at the low estimate of five pence per gallon. France also furnished

salt worth 181,000 crowns, and wood to the amount of 300,000 crowns, and other merchandise.

At this time the Netherlands sent 700 busses to the herring fishery, on the coast of England, which returned 588,000 barrels of herring, worth 1,400,000 crowns.

"This country," says the historian, "has no vines, but plenty of wine; no flax, but makes the best linen; no wool, but infinite quantities of the best cloth. Diligence, vigilance, valor and frugality were indigenous, but were freely communicated to all who came there."

Antwerp tottered to its fall under the cruel policy of PHILIP II., and was sacrificed by his religious intolerance. In 1567 the Duke of ALVA entered the Netherlands with his Spanish infantry, trained in the wars of CHARLES V. Commerce left at his approach, and nearly 100,000 people fled in a brief space from Antwerp and its environs, many of whom settled in England, and transferred to that rising nation their wealth and manufactures.

In 1576 Antwerp was sacked by the French. In 1585 it was captured by the Prince of Parma; and in 1648, at the close of the long struggle between France and Spain, which lasted more than eighty years, and cost Spain more than 1,500,000,000 ducats, Holland dictated the terms of peace; and out of regard for the new city of Amsterdam, closed the foreign port of Antwerp by the treaty of Westphalia.

For many years its harbor continued closed, but after it came into the possession of France, NAPOLEON appreciated its admirable position, and removed the impediments to its navigation, excavated twenty-four acres for docks and basins for ships of the line, and constructed large depots and quays, which, although intended for a navy, are now devoted to the peaceful pursuits of commerce.

Antwerp is now the chief seaport of Belgium, and still retains, in its churches, palaces and public edifices and paintings, many memorials of its ancient splendor.

THE HAGUE—LA HAYE.

THE COUNT'S MEADOW.

We pass now from Belgium into Holland, a country nearly level, and in great part reclaimed from the sea, nearly destitute of coal, limestone and metals, and obliged to maintain a constant struggle with the German Ocean, whose seaports are closed by ice a large part of the year.

The Hague, now a city of sixty thousand people, is situate upon a branch of a canal between Leyden and Rotterdam, and at the distance of thirteen miles from the former and ten miles from the latter city. It was the ancient residence of the feudal lord of Holland, and in modern times has been the residence of the court, to which it principally owes its importance, its trade finding an outlet by Delft and Rotterdam, both in close proximity.

It contains many ancient structures, among them the National Museum, once the palace of Prince MAURICE, and the Bernen-hof, an ancient Gothic building, once the palace of the counts of Holland, and subsequently the prison of GROTIUS.

Its principal business is still the manufacture of books and porcelain.

LEYDEN.

This city, built upon the old Rhine, is of very ancient origin. Its church of **ST. PETER**, one of the finest religious edifices of Holland, was commenced in 1321.

In 1574 it was besieged by the Spanish General **VALDEZ**, but its citizens determined to die rather than submit to the blind and brutal despotism of Spain, and after a heroic resistance, which cost the Spanish many lives and contributed to the defence of all Holland, the dikes were cut and the ocean permitted to inundate the land. The forces of the Spaniards were broken by a squadron of armed boats which relieved the city.

As a reward for this gallant defence, **WILLIAM**, Prince of Orange, founded here a university, which afterwards acquired great celebrity. The city for a century and a half was distinguished for its learning, its Elzevir editions of the classics and for the manufacture of cloth.

Its population rose to 100,000, but since the French revolution, has declined to less than half that number.

Leyden is superior in population to Utrecht, where the Dutch confederacy was formed, and where there is also an ancient but less celebrated university.

DELFT.

This ancient town, which lies between the Hague and Rotterdam, and within four miles of the latter city, was founded in 1074, and was long renowned for the manufacture of porcelain, cloths and carpets. Its porcelain was carried to all parts of the world by Dutch commerce until the cheaper wares of England gained a preference.

Its population is now but 15,000, and its modern expansion is in the almost contiguous seaport of Rotterdam, the second city of Holland.

ROTTERDAM.

This city, on the Maese, the chief outlet of the Rhine, contains not far from 100,000 people, and, with the adjacent cities of Leyden, the Hague and Delft, may be rated at twice that number. It forms the principal mart for the products and commerce of the Rhine.

Its church of **ST. LAWRENCE** dates back to 1412. It was the birthplace of **ERASMUS**, and has been one of the seats of the Dutch commerce with the East, still retaining its India house, but it is much indebted to modern commerce for its importance.

It is largely engaged in the importation and manufacture of tobacco and sugar, and has large distilleries.

Rotterdam has much foreign commerce, and lines of steamers upon the Rhine and to the seaports of Great Britain.

Its principal quay upon the river is thronged with shipping, and from this, streets, with canals in their centres, lined by masts and fringed by trees, extend at right angles; and on these streets are the stately residences of the merchants; each house has its warehouse in the rear, and the house combines the counting-room with the dwelling.

AMSTERDAM.**AMSTEL, THE DAM OF THE AMSTER.**

In 1578 the Netherlands united in resisting the intolerance of Spain. In the succeeding year the Prince of Parma reduced the principal part of Belgium; and the seven provinces of Holland, which contained less than fourteen thousand square miles—a country less in size and population than the States of Massachusetts, Connecticut and Rhode Island—a territory principally reclaimed from the German Ocean, formed a federal union to resist the power of Spain, then the most powerful nation of the world, and, after a struggle of eighty years, achieved their independence and placed Holland at the head of commercial nations.

Amsterdam, the chief city of the seven provinces, rose from insignificance during this struggle.

In 1342, when WILLIAM III., Earl of Holland, began to adorn it, this city consisted of a castle, encircled by the huts of a few fishermen. In 1370 it joined the Hanseatic League, and in 1399 received a charter of privileges from Earl ALBERT, which formed the basis of its future growth.

In 1400 the sea made an inlet into the Texel, and the fisheries having failed in the Baltic, the trade of that sea began to centre in this port, and to exchange hemp, iron and timber for salt and herring.

Amsterdam continued to pursue the Baltic trade and herring fishery until the war with Spain, and the struggle for civil and religious liberty infused into it new vigor. At the commencement of the struggle the Duke of Alva expelled the Protestants and confided the government to the Catholics, but its hardy mariners, reared in the fisheries, and rocked by the boisterous waves of the Baltic, now threw off their allegiance to Spain, and found themselves able to cope with her upon the ocean, and draw from the deep the means of resisting her well-disciplined armies, backed, as they were, by the wealth of Mexico, Peru and the Indies. And in 1603, after the struggle had lasted a quarter of a century, Sir WALTER RALEIGH laid before King JAMES the following statement of facts, to which he ascribes the success which had enabled Holland, and more especially her chief city, to carry away the trade of the world:

- 1st. The privileges they confer upon foreigners.
- 2d. Their extensive magazines, competent to supply all nations in time of scarcity.
- 3d. Their low tariffs.
- 4th. Their large ships, great carriers, and navigated by few hands.
- 5th. Their prodigious fishery.

Amsterdam, he observes, has always in store seven hundred thousand quarters of grain, and a dearth for one year enriches her for seven. In the last dearth she took £2,200,000 from England. Holland, he adds, sends to us annually six hundred ships, and we send in return but fifty.

She exports to northern seaports 100,000 lasts of herrings, and large quantities in addition to the Mediterranean, (by a low estimate, 1,300,000 barrels,) and these are taken on the coast of England.

The corn grows in the east countries in Poland and Livonia; yet the great storehouses for Christendom in dearth are in the Low Countries.

The mighty store of wine and salt are in France and Spain, but the great vintage of wine and staple of salt are in the Low Countries, and

they send one thousand sail laden with wine and salt into the East Countries.

The exceeding great groves of wood are in the east countries, chiefly within the Baltic, but the large piles of wainscot clapboards, deal, masts and other timber, are in the Low Countries, where none groweth.

The wool, cloth, lead, tin and divers other commodities are in England, but by means of our wool and our cloth going out rough and undressed and undyed, there is an exceeding manufacturing of drapery in the Low Countries, wherewith they serve themselves and other nations, and greatly advance the employment of their people and traffic, and, in proportion, suppress ours. We send into the East Countries but one hundred ships, but the Low Countries send thither about three thousand ships. They send into Spain, France, Portugal and Italy about two thousand ships with those East Country commodities, and we none that course. The Low Countries have as many ships and vessels as eleven kingdoms of Christendom, let England be one.

They build every year one thousand ships, although all their native commodities do not require one hundred to carry them at once; yet our ships and mariners decline, and traffic and merchants daily decay.

The history of Holland, and the comments of the great statesman and warrior of England disclose the remarkable fact, that a small but hardy republic, recoiling from oppression and servitude, and struggling for existence with the greatest power which had been established in Europe since the days of CHARLEMAGNE, had, in the brief space of one-quarter of a century, by adopting liberal institutions and low tariffs, and attracting to it the outcasts of Flanders, launching boldly into the fisheries and commerce, made itself the most commercial nation of the world, and established a vast trade, most of which centered in Amsterdam.

We cite two of the mottoes of Holland at this period :

"Per mare pauperiem fugiens per saxa per ignes."

"Duris urens in rebus egestas."

In 1602 the Dutch East India Company was formed from several small societies, with a capital of 6,449,211 guilders, of which three-fifths were held at Amsterdam.

The company was successful.

In 1602 it divided.....	15 per cent.
In 1605 "	15 "
In 1606 "	75 "
In 1607 "	75 "

In 1605 PHILIP II. prohibited Holland from trading with Spain and the Indies, but this inspired the Dutch with resolution and diligence, and they at once despatched nineteen armed ships, which captured Ambogna and Molucca, Java, Ceylon, the coast of Malabar and Coromandel, and established posts from Batavia and Japan, and defeated the Spanish and Portuguese in several naval engagements.

In 1609 Spain, exhausted by the contest, was obliged to acquiesce in a twelve years truce.

In 1608, the year preceding the truce, and in 1609, two events occurred of great interest to Amsterdam and to the commercial world.

HENDRIK HUDSON discovered the Hudson River, and laid the foundation for a new Amsterdam in America, where civil and religious liberty and a

flourishing commerce were soon established—a city which, like Amsterdam itself, was slow to join the new republic of the United States, but which, with the advantages of that union for the last three-quarters of a century, has grown with even more rapidity than its prototype, and which, in the coming century, if true to itself while pursuing its onward course, and frowning down misrule, and preventing liberty from degenerating into licentiousness or secession, bids fair to attain to a height never reached by any other commercial city. In the same year was founded the great Bank of Amsterdam, the first bank of Northern Europe.

Large payments in silver were found inconvenient and gold hazardous, and this led to the establishment of a bank where transferable credits soon rose to an agio of five per cent.

Ten guilders were charged for the privilege of opening an account, and one stiver for each payment.

This bank acquired great celebrity, and contributed to the growth and power of Amsterdam for one hundred and eighty-eight years, until its discontinuance upon the French revolution in 1796.

In 1636 the Dutch West India Company, in which Amsterdam was largely interested, occupied the coast of Brazil, and in the course of thirteen years captured four hundred and ninety sail of vessels from Portugal, of which the King of Spain was then the sovereign, and in the same period this company sent eighteen hundred sail to the coast of Brazil.

The East India Company was still more successful.

From 1605 to 1728 its dividends ranged from 12½ to 78 per cent., averaging more than 24 per cent. per annum, and in the course of one hundred and twenty-four years it divided 2,784½ per cent., or more than eighty-seven millions of dollars upon its original capital, beside large sums expended for the construction of ships and for renewal of charters, and large estates acquired by the officers and agents of the company.

After the peace of 1648 Amsterdam embarked largely in the Northern whale fishery, and in the space of forty-six years despatched 5,886 ships in pursuit of whales, which captured 32,907 whales, of the average value of £500 each. The aggregate amount of their returns was \$78,000,000, and the average number of ships engaged annually in this branch of commerce was one hundred and twenty-five, taking each from five to six whales annually. Such was the expansion of the commerce of Holland, in which Amsterdam took the lead—a commerce conducted under a system of short credit—that in 1690 Sir WILLIAM PERRY estimated the entire tonnage of Europe at 2,000,000 of tons, 900,000 of which, or nearly one-half, was owned by Holland.

In 1666 took place the great naval contest between Holland and England, in which Admiral DE RUYTER sunk twenty-three English ships.

A severe struggle for naval ascendancy took place between Holland and England. These two nations had at sea three hundred large ships, of which some were ships of the line, and this occurred at a time when Louis XIV. had but fourteen ships of war; and although England at length gained the ascendancy, there was a period when VAN TROMP is reported to have swept the British Channel with a broom at his masthead, and Holland did not succumb until she had felt the combined strength of France and England.

Amsterdam was ever the refuge of the oppressed of all nations. Holland allowed a stipend to clergy of all denominations, and her people

were distinguished for piety and respect for religion. Schools and colleges were encouraged, and her children, in the ratio of one in eight of the population, were constantly attending school; and at a time when intolerance prevailed in other nations, their Protestant subjects sought the light of the reformation—the aid of the printing press—the security of private rights and freedom of commerce in the City of Amsterdam. And this city, although checked by the desolating wars of Louis XIV., in the Low Countries, and the exhausting wars of the Duke of MARLBOROUGH, and the seven years' war of FREDERICK the Great, in which Holland reluctantly became involved, was, during the seventeenth and the first half of the eighteenth century, the metropolis of the commercial world, and in 1785 had attained to a population of 235,000.

Under the French occupation it declined one-fifth, to 180,000, in 1814, but has since recovered, and in 1838 contained 26,000 houses, and has in modern times been connected with the German Ocean by a canal to the Helder, 125 feet in width, 20 feet deep and 50 miles in length, one of the great achievements of the age, and made at a cost of nearly five millions of dollars.

This great city, built upon a marsh, in a country nearly destitute of limestone, coal and pure water, resting on piles, or, as the Dutch express it, upon herring bones, in allusion to the pursuits of its founders, at a distance from the sea, and accessible from it in former days by an intricate navigation, barred by the ice a quarter of the year, is a remarkable instance of what enterprise, sagacity, frugality, perseverance and piety can accomplish under free institutions during a period when the greater part of Europe was subject to superstition, serfdom and feudal institutions and restrictions of the dark ages.

Holland, by her untiring industry, had converted her standing pools and marshes into fat meadows, covered her wastes with rich verdure, and made her deserts bloom; she had enriched her cities by commerce, but could not escape the convulsions of Europe.

And during her subjugation she felt the power of England, whose shipping and naval power had at length risen above that of Holland.

Her ships and colonies were taken, her commerce annihilated, and many of her ports effectually sealed.

But with peace she recovered her most important colonies, revived her trade and utilized her wealth, which had remained concealed or been invested in Great Britain or America; but she found herself when severed from Belgium under a debt of eight hundred and fifty millions of dollars, to be borne by less than two and a half millions of people, but it was due principally to the inhabitants of Holland, and they hold also a large amount of both French, English, Austrian and American securities. The debt of Holland, which was at least \$350 for each inhabitant, has been a severe burden; she has, however, with great punctuality and honesty, met the interest and is extinguishing the principal.

By monopolizing the coffee of Java, and, to some extent, the spices of the Moluccas, and by encouraging the culture of coffee, she has created an Indian revenue which, within the last twenty years, has cancelled nearly one-third the debt of Holland, and in twenty years more she bids fair to wipe out entirely this debt, and to build up abroad a revenue sufficient to relieve the patient Hollander from the ordinary burden of government. Courage, patience, perseverance and honesty will meet with the ultimate reward to which they are entitled.

JOURNAL OF MINING, MANUFACTURES AND THE ARTS.

THE COPPER INTEREST OF MICHIGAN.

This great interest of Michigan was first brought into public notice by the enormous speculations and the mad fever of 1845. The large spur of country which projects far out into the lake, having its base resting on a line drawn across from L'Anse Bay to Ontonagon, and the Porcupine Mountains for its spine, became the El Dorado of all copperdom of that day. In this year the first active operations were commenced at the Cliff mine, just back of Eagle River harbor. Three years later, in 1848, work was undertaken at the Minnesota, some fifteen miles back from the lake at Ontonagon.

It is scarcely ten years that mining has been properly commenced in that remote region. At that time it was difficult, on account of the rapids of St. Mary's River, to approach it by water with large craft. Being more than a thousand miles distant from the centre of the Union, destitute of all the requirements for the development of mines, every tool, every part of machinery, every mouthful of provision had to be hauled over the rapids, boated along the shores for hundreds of miles to the copper region, and there often carried on the back of man and beast to the place where copper was believed to exist. Every stroke of the pick cost tenfold more than in populated districts; every disaster delayed the operations for weeks and months.

The opening of the Sault Canal has changed all this, and added a wonderful impetus to the business, the mining interests and the development of the Lake Superior country. Nearly one hundred different vessels, steam and sail, have been engaged the past season in its trade, and the number of these is destined to increase year by year—an indication of the growth of business and the opening up of the country.

It remains yet almost wholly "a waste, howling wilderness." At Marquette, Portage Lake, Copper Harbor, Eagle River, Eagle Harbor and Ontonagon, and the mines adjacent, are the only places where the primeval forests have given place to the enterprise of man; and these, in comparison with the whole extent of territory embraced in this region, are but mere insignificant patches. What this country may become years hence, it would defy all speculations now to predict, but there is no reason to doubt that it will excel the most sanguine expectations.

The copper region is divided into three districts, viz: the Ontonagon, the most northern; the Keweenaw Point, the most eastern, and the Portage Lake, lying mostly below and partially between the range of the two. In the first are situated the Minnesota, the Rockland, the National, and a multitude of other mines of lesser note, profit or promise. In the second are the Cliff, the Copper Falls and others. In the last are the Pewabic, Quincy, Isle Royale, Portage, Franklin and numerous others. Each district has some peculiarities of product, the first developing more masses, while the latter are more prolific in vein rock, the copper being scattered throughout the rock.

There have been since 1845 no less than 116 copper mining companies organized under the general law of our State. The amount of capital invested and now in use, or which has been paid out in explorations and improvements, and lost, is estimated by good judges at \$6,000,000. The nominal amount of capital stock invested in all the companies which have charters would reach an indefinite number of millions. As an offset to this it may be stated that the Cliff and Minnesota mines have returned over \$2,000,000 in dividends from the beginning of their operations, and the value of these two mines will more than cover the whole amount spent in mining, and for all the extravagant undertakings which have been entered upon and abandoned. While success has been the exception and failure the rule in copper speculations, yet it must be admitted that these exceptions are remarkably tempting ones. Doubtless there is immense wealth still to be developed in these enterprises, and this element of wealth in the Lake Superior region is yet to assume a magnitude now unthought of.

The copper is smelted mainly in this city, Cleveland and Boston, the works in this city being the largest. There is one establishment at Pittsburg which does most of the smelting for the Cliff mine, we believe; one at Bergen, New-York, and one at New-Haven, Connecticut. There are two at Baltimore, but they are engaged on South American mineral. The Bruce mines, on the Canada side of Lake Huron, have recently put smelting works in operation on their location. Prior to this the mineral was barrelled up and shipped to London, being taken over as ballast in packet ships at low rates.

The amount of copper smelted in this city we can only judge by the amount landed here; but this will afford a pretty accurate estimate. The number of tons landed here in 1859 was 3,088. The copper yield of Lake Superior will produce between 60 and 70 per cent. of ingot copper, which is remarkably pure. The net product of the mines for 1859 is worth, in the markets of the world, nearly or quite \$2,000,000. This large total shows the capabilities of this region, and affords us some basis of calculation as to the value and probable extent of its future developments.

Besides the amount already noticed as landed here, there were 1,268 tons brought to this city from the Bruce mines, and sent on to London. The mineral of this location is of a different quality from that of Lake Superior, and not near as productive of pure copper.—*Report of Detroit Tribune for 1860.*

QUICKSILVER.

In 1859 the exports of this very valuable product of the mining industry of California received a serious check through the measures adopted by the Federal Government against the ostensible owners of the famous New-Almaden mine. The operations of their works were accordingly suspended. A decision in the case having been recently given, and the injunction having been removed, operations have been resumed.

Owing to the stopping of the New-Almaden mine, the other mines of California were very industriously worked last year, under the increased demand for their product. The following table shows the number of

flasks of quicksilver produced during last year by the three other California mines :

	<i>New-Jaria.</i>	<i>Enriqueta.</i>	<i>Gaudaloups.</i>
First quarter,.....	991	881	825
Second quarter,.....	1,045	1,722	650
Third quarter,.....	1,004	2,390	600
Fourth quarter,.....	1,578	1,823	600
Total,.....	4,618	6,816	2,675

Being a total production for the year of 14,109 flasks of 75 lbs. each, Spanish weight, from the three mines.

	<i>Flasks.</i>
Total production in 1860,.....	14,109
Exports from San Francisco in 1860,.....	9,348
Stock in San Francisco 1st January, 1861,.....	10,348

Showing consumption in California,..... 3,761

Or about three hundred flasks per month on an average. The ruling price in 1860 was sixty cents for consumption, (seventy-five cents at the opening of the year,) and fifty cents for export, the latter reduced in January last to $47\frac{1}{2}$ cents per pound.

The exports and destination of quicksilver during the past year were as follows :

	<i>Flasks.</i>		<i>Flasks.</i>
New-York,.....	400	Peru,.....	750
Mexico,.....	3,886	Valparaiso,.....	1,040
Australia,.....	100	Vancouver's Island,.....	327
China,.....	2,715	Panama,.....	130
Total,.....			9,348

The exports previously for six years were as follows :

	<i>Flasks.</i>		<i>Flasks.</i>
1854,.....	20,963	1857,.....	27,262
1855,.....	27,165	1858,.....	24,132
1856,.....	23,740	1859,.....	3,399

The value of the exports from San Francisco of this metal for the year 1860 was \$350,600.

METALS.

The shipments of lead from the Upper Mississippi lead mines, located in Illinois, Wisconsin and Iowa, during the last year, were as follows :

	<i>Pigs.</i>	<i>Pounds.</i>		<i>Pigs.</i>	<i>Pounds.</i>
From Galena,.....	147,837	18,848,590	From Council Hill,..	14,203	994,210
" Dubuque,...	55,327	3,872,890	" Scales Mound,...	13,024	911,680
" Warren,...	49,050	3,438,500	" Dunleith,.....	10,298	720,860
" Apple River,...	29,626	3,073,820	" Cassville,.....	9,965	691,550
" Potosi, (est.,)	20,000	1,400,000			
			Total,.....	349,330	24,453,100

The market value of the above was \$1,283,787.

Tin is increasing in value yearly. The British exports last year amounted to 2,804 tons, and the mean average price for the year has been £130 18s. (\$634 46.) There has been an increased speculation in the tin mines of England.

MINNESOTA COPPER MINE FOR SIX YEARS.

	1855.	1856.	1857.	1858.	1859.	1860.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Product of rough copper,.....	1,494 ..	1,859 ..	2,058 ..	1,884 ..	1,626 ..	2,150
Average product per month,.....	119½	155 ..	171½	158 ..	135½	179
Per centage of yield of ingot copper,	71 ..	73 ..	74 ..	70 1-10	71 ..	73½
Average price obtained per pound,	27.09c.	25.67c.	23.68c.	22.66c.	22c.	20.92c.
Gross value,.....	\$ 549,876	\$ 701,906	\$ 786,000	\$ 595,000	\$ 515,786	\$ 654,594
Cost of mining,.....	189,780 ..	241,749 ..	279,402 ..	278,746 ..	279,329 ..	312,908
Transportation,.....	35,895 ..	42,371 ..	49,558 ..	43,184 ..	37,187 ..	44,473
Smelting,.....	22,971 ..	34,982 ..	41,077 ..	38,278 ..	32,004 ..	40,389
All other expenses,.....	32,787 ..	37,589 ..	32,502 ..	29,624 ..	35,974 ..	46,759
Total cost,.....	280,933 ..	356,641 ..	402,538 ..	384,927 ..	384,394 ..	445,836
Net earnings,.....	268,943 ..	345,265 ..	383,462 ..	210,176 ..	131,391 ..	210,766

In the item of \$46,759, for 1860, is included a charge for defending the "Titus' Suit," of nearly \$10,000.

MACHINERY IN THE USEFUL ARTS.

A correspondent of one of our daily papers, journeying in Massachusetts, thus describes some new applications of machinery to the mechanic arts in that busy industrial hive:

The extent to which machinery is taking the place of hand-labor is strikingly illustrated in making ladies' shoes. I recently visited a manufactory in Haverhill, Mass., where, with the machinery in use, twenty-five persons turn out 600 pairs daily. All the stitching is done by *sewing machines run by steam*—a combination of the two greatest mechanical inventions. Every operation except fitting the shoe to the last, even to the final polishing, and cutting the pegs out of the inside to prevent them from hurting the foot, is performed by machinery. One of the greatest curiosities is the pegging machine, which inserts the awl, cuts out the pegs from a strip of wood, and drives them in, all at one operation, and so rapidly that it will peg two rows around the sole of a shoe in twenty seconds. The facilities in this manufactory are such that the raw calf-skin and sole leather can be taken in the basement of the building and in half an hour turned out in the form of a complete pair of shoes!

A stroll through the Pacific Cotton and Print Mills in Lawrence, a few days since, gave me a vivid impression of the vastness of the manufacturing interests of that young city. I had often observed the factories before from the car window, but did not realize the greatness of the whole until I had seen something of the details. The Pacific Mills consist of two buildings, each nearly nine hundred feet in length. Their full complement of employes is now twenty-one hundred, and will be twenty-seven hundred as soon as the machinery is all set up in an extension of the main building, just completed. The raw cotton goes in in bales at one end, and comes out at the other manufactured goods, ready for the market. Curious ladies, by strolling through the print and delaine departments, can learn what styles are to prevail several months hence. I will not attempt to tell you how many yards of plain cotton cloth, prints, lawns and other goods can be turned out in a week; it is too far up among the ciphers for me to venture. One of the machines for printing delaines, stamps the piece with *sixteen* different colors and shades of colors in passing through once. There is only one other like it in the world.

SUGAR TRADE OF THE UNITED STATES.

Annual Statement, showing the Import, Export, Stock and Consumption of Unrefined, for the year ending December 31st, 1860, (exclusive of California and Oregon.)

From the Shipping and Commercial List, and New-York Price Current.

NEW-YORK STATEMENT—1860.

Year 1860.	Hbda.	Ton.	Bbls.	Bra. and Cacao.	Bags, Mats and Barks.	Total Tons of 2,340 lbs.
RECEIVED AT NEW-YORK FROM						
Cuba,	329,900	10,044	10,071	164,118	484	171,184
Porto Rico,	44,826	286	5,993	..	..	52,705
St. Croix,	181	..	56	..	..	108
Brazil, .....	..	..	660	1,118	68,509	5,098
Manila, .....	..	..	..	..	118,976	3,822
Singapore, Java, China, &c., .....	..	..	..	..	74,561	5,890
Jamaica,	1,022	749	1,484	..	..	1,822
Trinidad Island,	456	154	86	..	..	594
Demerara,	1,550	108	3,308	..	..	1,558
Barbadoes, Antigua and other Eng- lish Islands,	258	274	1,315	..	..	847
St. Domingo, Honduras and other foreign countries,	57	106	1,846	546	1,748	481
Total receipts of foreign direct,	277,521	11,691	24,600	165,963	264,518	211,854
*Add receipts of MELADO, &c.,	86,739	1,176	49	..	..	19,861
Received from Texas,	2,156	40	191	..	..	984
" " Louisiana,	15,690	6	912	..	..	8,180
" " other coastwise ports, ..	2,579	8	44,780	681	1,998	5,975
Total receipts,	894,728	12,916	70,481	166,488	266,516	289,824
Add stock Jan. 1, 1860,	22,208	..	..	90,090	26,688	18,090
Total supply,	356,931	12,916	70,481	187,108	293,154	257,844
Deduct exports to foreign ports, ship- ments to San Francisco, and inland to Canada, 1860,	10,586	..	..	17,788	3,563	9,981
	846,895	12,916	70,481	169,318	281,559	247,418
Deduct stock, (Melado included,) } January 1, 1861,	41,403	..	..	16,768	141,488	84,178
Taken from this port for consumption, ..	804,998	12,916	70,481	152,550	148,071	213,235

Weighting as above, . . . tons,	\$18,985—of which foreign, received direct and coastwise, . . . tons,	199,483
Total consumption in 1899..	190,185	“ “ “ “ “ “ 189,687

Weighting as above, . . . tons,	214,780	— of which foreign, received direct and coastwise, . . . tons,	199,483
Total consumption in 1869, . . .	190,185	“ “ “ “ “ “	150,627

Increase in 1860,.....tons,	93,100	Increase in consumption of foreign in 1860.....tons,	89,805
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* We have put down, as usual, the whole number of packages of MELADO, &c., received, but in carrying out the weight, have deducted 40 per cent., to make it equal to ordinary grade of sugar. The same allowance has also been made in receipts, stocks and exports throughout the statement.

NEW-YORK STATEMENT—1859.

Year 1859.	Hhds.	Tons.	Bbls.	Exa. and Cases.	Bags, Mals and Bkts.	Total Tons of 2,240 lbs.
RECEIVED AT NEW-YORK FROM						
Cuba,	181,583	3,873	7,179	154,178	483	140,101
Porto Rico,	81,606	176	3,885	..	..	15,967
St. Croix,	60	..	7	..	..	20
Brazil,	9	1	688	3,956	95,696	8,106
Manilla, .....	..	..	..	..	88,043	2,751
Singapore, Java, China, &c., .....	..	..	..	..	36,255	2,333
Jamaica,	384	426	635	..	..	443
Trinidad Island,	2,547	1,169	578	..	..	2,444
Demerara,	94	9	43	..	..	23
Barbadoes, Antigua and other Eng- lish Islands,	168	119	1,067	..	..	223
St. Domingo & other foreign ports, ..	55	15	1,309	814	1,291	956
Total receipts of foreign direct,	216,264	10,774	15,279	157,443	231,769	173,796
* Add receipts of MEXICO, &c.,	10,971	383	860	..	..	4,514
Received from Texas,	2,114	69	97	..	..	969
“ “ Louisiana,	45,344	18	796	161	..	22,341
“ “ other coastwise ports, ..	5,586	214	44,398	1,081	74	7,086
Total receipts,	280,179	11,453	60,925	158,680	231,843	209,220
Add stock Jan. 1, 1859,	12,873	..	..	14,439	..	9,837
Total supply,	293,052	11,453	60,925	173,119	231,843	219,057
Deduct exports to foreign ports, ship- ments to San Francisco, and inland to Canada, 1859,	13,005	..	..	19,446	7,407	10,933
Deduct stock, (Melado included,) Jan. 1, 1860,	280,047	11,453	60,925	158,738	214,436	208,185
1, 1860,	22,308	..	..	20,620	26,633	13,639
Taken from this port for consumption,	257,844	11,453	60,925	138,118	197,798	190,135
Weighting as above,	tons, 190,135	Of which foreign, received direct and coastwise,	tons, 159,067			
Total consumption in 1859,	195,801	Of which foreign, received direct and coastwise,	159,067			
Increase of 1859,	tons, 4,334	Increase in consumption of foreign in 1859,	tons, 573			

The maple tree still occupies a position by no means insignificant in the manufacture of sugar. Though it is impossible to arrive at the exact extent of the crop of sugar yielded from this source, sufficient is ascertained to justify us in placing that crop at about 28,000 tons, an amount sufficient to interfere to a considerable extent in the Northern States with the consumption of sugar made from the tropical cane.

The erection of new refineries in California has enlarged the demand for raw in that quarter, and the quantity taken there the past year has been somewhat increased. We estimate the consumption of that State at 8,000 tons, so that the total consumption of raw sugar of all kinds in the United States in 1860 may be set down at 464,673 tons, against a total consumption in 1859 of 478,737 tons, being a decrease in the consumption of 1860, as compared with the previous year, of 14,064 tons, or 2 15-16 per cent.

* We have put down, as usual, the whole number of packages of MELADO, &c., received, but, in carrying out the weight, have deducted 40 per cent., to make it equal to ordinary grade of sugar. The same allowance has also been made in receipts, stocks and exports throughout the statement.

GENERAL STATEMENT.

RECEIPTS OF FOREIGN SUGAR IN THE UNITED STATES,

From 1st January to 31st December, 1860.

RECEIVED AT	Hhds. and Tons.	Bbls.	Boxes and Cases.	Sacks, Mats and Bkts.	Total Tons of 2,240 lbs.
New-York, direct,	327,170	24,718	165,802	264,518	224,215
Boston, "	33,419	849	87,116	241,972	44,927
Philadelphia, "	37,230	4,261	19,332	57,714	23,215
Baltimore, "	35,548	10,231	26,535	55,062	28,619
New-Orleans, "	4,523	301	23,097	2,462	6,682
Other ports, "	13,703	2,892	5,192	540	8,574
Total receipts,	451,598	43,252	327,574	622,268	341,532
Add stock at all the ports, January 1, 1860,	25,330	..	34,406	26,638	22,947
Total supply,	477,428	43,252	361,980	648,906	364,479
Deduct exports and shipments inland to Canada, from all the ports, in 1860, ..	14,074	325	24,018	10,015	13,234
Deduct stock at all the ports, January 1, 1861,	463,354	42,927	337,962	638,891	351,245
1, 1861,	57,204	..	49,633	253,878	54,295
Total consumption of foreign,	406,150	42,927	288,329	385,018	296,950

Consumption of foreign in 1860, as above, tons, 296,950
 Consumption of foreign in 1859, tons, 239,034

Increase in 1860, tons, 57,916

Consumption of foreign in 1860, tons, 296,950

Add crop of 1859-60, of Louisiana, Texas, Florida, &c., the bulk of
 which was distributed in 1860, and assuming the stock 1st January
 each year to be equal, 119,046

Less shipped to California, &c., not included in foregoing statement of
 exports, 715

118,331

Would make the total consumption of cane sugar in the United States in
 1860, tons, 415,281

Total consumption of foreign and domestic cane sugar in 1859, 431,184

Decrease in 1860, tons, 15,903

The decline in the consumption must be attributed to the paralysis which prostrated nearly every branch of commerce during the greater part of the last quarter of the year, occasioned by the political panic, its baneful results entailing monetary embarrassments, destruction of confidence, total derangement of interior exchanges, and, for a time, almost entire cessation of business.

The Cuba crop, it is generally conceded, will be something larger than last year, which was 503,280 tons. That of Porto Rico, it is thought, will be at least ten per cent. above the previous crop. The prospect is good in most, if not all the British West India Islands, and Brazil and the East Indies will doubtless be able to furnish their quota.

From 1st January to 31st December, 1859.

RECEIVED AT	Hhds. and Tons.	Bbls.	Bxs. and Cases.	Bags, Mats and Bales.	Total Tons of 2,240 lbs.
New-York, direct,.....	238,392	15,639	157,448	221,769	177,312
Boston, ".....	28,812	1,060	63,703	59,903	31,138
Philadelphia, ".....	32,703	3,152	15,023	46,206	24,696
Baltimore, ".....	23,290	4,254	9,720	13, 3	16,756
New-Orleans, ".....	621	107	10,185	454	2,213
Other ports, ".....	17,292	2,295	4,897	3,042	10,714
Total receipts,.....	341,110	26,507	260,976	349,537	262,539
Add stock at all the ports, January 1, 1859,.....	14,200	..	25,781	5,031	13,246
Total supply,.....	355,310	26,507	286,757	354,568	276,175
Deduct exports and shipments inland to Canada, from all the ports, in 1859,	17,618	..	21,985	9,492	14,194
Deduct stock at all the ports, January 1, 1860,.....	337,692	26,507	264,822	345,076	261,961
	25,830	..	34,406	26,638	22,947
Total consumption of foreign,.....	311,862	26,507	230,416	318,438	239,034
Consumption of foreign in 1859, as above,.....					tons, 239,034
Consumption of foreign in 1858,.....					244,758
Decrease in 1859,.....					tons, 5,724
Consumption of foreign in 1859,.....					tons, 239,034
Add crop of 1858-59, of Louisiana, Texas, Florida, &c., the bulk of which was distributed in 1859, and assuming the stock 1st January each year to be equal,.....					193,435
Less shipped to California, &c., not included in foregoing statement of exports,.....					1,285
					192,150
Would make the total consumption of cane sugar in the United States, in 1859,.....					tons, 431,184
Total consumption of foreign and domestic cane sugar in 1859,.....					388,492
Increase in 1859,.....					tons, 42,692

By an examination of the preceding statistics, it will be seen that the total receipts of foreign raw sugars into the United States (California and Oregon excepted) for the year ending December 31, 1860, were 341,532 tons, against receipts in 1859 of 262,829 tons; in 1858 of 255,100 tons; in 1857, 269,180 tons; in 1856, 275,662 tons; and in 1855, 205,064 tons, being by a very considerable amount the largest quantity of foreign ever imported into the country. If we turn now to the consumption of this description, the figures show that the quantity of foreign growth withdrawn for this purpose in 1860 was 296,950 tons, against a consumption of foreign in 1859 of 239,034 tons; in 1858, 244,758 tons; in 1857, 241,765 tons; in 1856, 255,292 tons; and in 1855, 192,604 tons. Thus, it will be seen, that the quantity of foreign received, and the quantity of foreign consumed, is greater, by a very considerable amount, than ever imported or consumed before in the history of the trade. But notwithstanding this large increase in the importation of foreign, it was

barely sufficient to counterbalance the serious decline in the production of domestic, which, as compared with the previous crop, shows a falling off of 74,389 tons, and hence the total receipts of foreign, and total supply of domestic cane sugar in 1860, varies but little from the total receipts and supply of 1859. By pursuing the examination, we arrive at the total consumption of foreign and domestic, which in 1860 was 415,281 tons, against a total consumption in 1859 of 431,184 tons; in 1858, 388,492 tons; in 1857, 280,765 tons; in 1856, 378,760 tons; and in 1855, 377,752 tons, being a decrease in the consumption of 1860, as compared with 1859, of 15,903 tons, or 3 11-16 $\frac{3}{4}$ cent.

The demand for clarified sugars has been very good for the greater part of the year, and the consumption of this description has been considerably increased, so that the estimates of sugar made from molasses must be advanced. Our researches show that the quantity of molasses taken for refining purposes during 1860 will reach about 60,000 hhds., yielding some three million pounds of sugar, say 13,392 tons, against 12,053 tons in 1859, obtained from 54,000 hhds. of molasses; 11,160 tons in 1858, from 50,000 hhds.; 10,300 tons in 1857, from 46,000 hhds.; 11,875 tons in 1856, from 53,000 hhds.; and 12,187 tons in 1855, from 50,000 hhds. In this connection, we observe that refiners complain more generally that the quality of molasses sent forward from Cuba, suitable for refining purposes, is gradually deteriorating, being more and more denuded of its saccharine properties by the improved processes of sugar-making, than the planting interests of that island have of late years introduced.

The quantity of foreign sugar that will be needed the present year would ordinarily be governed in a great measure by the crop of Louisiana now coming forward. Early in the season, a bountiful yield was anticipated; the spring opened most propitiously, the culture proceeded with vigor, and the area of cultivation was extended, but the very severe drought of the summer seriously retarded the growth of the cane, and later in the season rains and floods still further reduced the estimates. The best authorities place the crop at 220 @ 250,000 hhds.; the yield will probably not vary much from 225,000 hhds., against a yield the previous year of 221,840 hhds.

The future of the trade seemed never more uncertain. The grave and deplorable events that have recently occurred in our political world are of so momentous a character that the most sagacious hesitate to venture a prediction as to our probable wants the current year. If the insanity that has smitten the body politic can be cured, and reason once more be permitted to resume her sway, peace would be followed, beyond a doubt, by a prosperity exceeding the expectations of the most sanguine. Never were the interests of the country in a condition more substantial. The food-raising States that have been laboring under embarrassments greater or less severe for the past several years, have at length, by a bounteous harvest, coupled most opportunely with a large foreign demand for bread-stuffs and other products of our soil, emerged from their difficulties, and wealth is flowing in upon them. The commercial and navigating States of the Union, whose transporting and carrying interests, both inland and seaward, have also suffered so long a season of depression, partake in the revival, and all available means are in demand in moving this produce from the interior to the ports and from thence beyond the seas. The

only element now lacking to give a further impetus to enterprise and commerce such as we have not seen for years, is a cessation of the present unhappy political tumult, and a return among the States to former fraternal relations. Should this consummation, so devoutly to be wished for, be attained, we can see nothing to prevent a larger consumption of sugars in 1861 than has ever been recorded.

ANNUAL REVIEW OF THE NEW-YORK MARKET.

By referring to the preceding tables, it will be seen that the receipts into this port direct of foreign unrefined sugar for the year ending December 31, 1860, were 224,215 tons, against an import in 1859 of 177,312 tons; in 1858, 163,134 tons; in 1857, 161,942 tons; in 1856, 171,156 tons; in 1855, 126,844 tons; and in 1854, 99,491 tons; and that the consumption of foreign descriptions in 1860 was 199,432 tons; in 1859, 159,627 tons; in 1858, 159,252 tons; in 1857, 143,829 tons; in 1856, 161,455 tons; in 1855, 121,356 tons; and in 1854, 92,500 tons; while the total consumption of both foreign and domestic in 1860 was 213,235 tons; in 1859, 190,135 tons; in 1858, 185,801 tons; and in 1857, 147,810 tons.

The foregoing figures briefly illustrate the commerce of this port in this article, and make an exhibit which cannot be looked upon otherwise than satisfactory, showing, as it does, that while the consumption of sugars in the country, considered as a whole, have fallen off, the quantity taken from our own market has increased by no inconsiderable degree, being equal to over 12 $\frac{1}{2}$ cent. when brought into comparison with the consumption of the previous year. Of the whole receipts of foreign into the United States, 65 to 100 $\frac{1}{2}$ cent. has been entered at this port.

There has been for the greater part of the year a good, healthy demand, accompanied by no very great fluctuations and but little speculative feeling. The average price of most descriptions for the year are slightly higher than in 1859; and had it not been for the political troubles of the past two months, which gave a paralyzing blow to this interest, in common with almost all others, reducing values of this commodity with a rapidity unexampled, the average prices would have been much higher. Refiners, as usual, have been the largest consumers, and the quantity taken by them for refining purposes, it is estimated, will reach the large figure of 120,000 tons. It would seem, from the erection of new establishments and the enlargement of old works, that this industrial pursuit is not in a languishing condition, though the probabilities are, that the effect of the vigorous competition that is now witnessed among this class, bears its usual fruit, profits reduced to a very small margin and risks proportionately enlarged.

In reference to the business the past year in raw, it may be safely written that the importation has not been attended with flattering results; the continued high cost in the cane-growing countries, owing to the competition among buyers at the shipping ports and on the plantation, has been productive in many instances of disaster, and more money has been lost than made by importers and consignors to the markets of this country. That these losses have been attended for the most part with so little embarrassment, is a matter of gratulation, evidencing that this class of merchants occupy a position of no ordinary strength.

The prospects for the immediate future cannot be called, at this present

writing, very favorable. Up to the beginning of the last quarter of the year, the deliveries for consumption at all the ports were in advance of the same time the previous year about 6 @ 7 ¢ cent. Since that time, under the mere apprehension that public events might take the shape which they have since actually assumed, that increase has been lost, with an additional three per cent., making a falling off in the consumption, during less than three months, of over nine per cent. If, then, the consumption the present year continue to decline as it has for the past two months, a much smaller importation than usual will be required. There are many, however, that adopt the view, that, under any circumstances, there will be a large demand, and that the quantity of foreign sugar needed will be as large, if not larger, than in any former year. It will not escape notice that the stock at this, as well as at most of the ports, 1st inst., was unusually large, the supply here being equal to about two months' consumption, at the ratio of last year's requirements.

The year opened with a stock of nearly 19,000 tons, an unusual large supply for this period of the season, but a healthy tone was observable; operators were inspired with confidence, the accounts from Cuba being of a character to warrant the belief that the receipts of the new crop would be delayed, while the Louisiana crop was sufficiently advanced to enable a pretty accurate estimate to be made as to the extent of the deficiency, and a good steady demand prevailed for the first half of the month, with an advance in prices, over the closing rates of December, of fully one-eighth of a cent @ lb. About the third week the market began to droop, and the turn was evidently in buyers' favor. This languid feeling soon gave way to one of positive depression; the dealings became small, and prices fell off one-eighth of a cent; at the close there was a slight rally, and in some instances values were re-established. The first receipt of new crop Texas reached here on the 16th. On the same day the first invoice new Demerara was laid down, and sold for refining at 7 cents, being earlier than the year before, the first arrival of Demerara then having occurred on the 4th February, selling at 7½ @ 7½ cents. The first arrival of new Cuba, as also of Brazil, took place on the 21st; the quality of the former green, and brought 6½ cents, against first arrival in 1859 on the 23d, "molasses sugar and clarified," which was placed at 7 @ 7½. The sales and re-sales for the month were 1,350 hhds. Louisiana, 122 do. Texas, 8,900 do. and 6,700 bxs. Cuba, 688 hhds. Porto Rico, 300 do., 27 tcs. and 536 bbls. English Island, 16,157 bags Manilla, 3,050 do. China, 6,550 do. Brazil, 81 do. African and 1,700 hhds. Melado.

The first few days of February were marked by a heavy, dull feeling, the business being restricted to the mere necessities of the trade. Refiners, however, shortly entered the market, the dealings were more liberal and full prices were paid. As the month advanced, the supply became reduced; the receipts of new crop West India came forward very sparingly; holders did not press their stocks, and prices, though no higher, were very firm. This favorable state of affairs for owners was but of short duration; West India and Louisiana came forward freely, and with more pressure to sell, a decline of one-eighth of a cent on low grades was submitted to, the bulk of the receipts being of this description. For good and prime qualities, full previous rates were paid, the month closing, however, with rather a dull feeling for all kinds, which, on low qualities, amounted to depression. The first arrival of new crop Porto Rico

occurred on the 14th, and sold at $7\frac{1}{2}$ @ $8\frac{1}{2}$ cents, against first arrival previous year on the 7th, which brought $7\frac{1}{2}$ cents. The sales were 2,300 hhds. Louisiana, 535 do. Texas, 9,800 do. and 6,700 bxs. Cuba, 675 hhds. Porto Rico, 284 do., 37 tcs. and 595 bbls. English Island, 10,989 bags Brazil and 825 hhds. Melado.

During the early part of March, the market became still further depressed, owing chiefly to the preponderance of inferior and green sugars in the receipts of West India, for which there was but little inquiry from refiners, and none at all from the trade, and prices of this description soon depreciated one-quarter of a cent. This concession, about the middle of the month, stimulated a speculative feeling; refiners also purchased more freely, and with a falling off in the receipts, holders were enabled to regain a portion of the previous decline. From this until toward the close, there prevailed a good steady demand for refining grades, with a firm tone. Grocery styles were all through the month scarce and wanted at very full rates. The receipts of all kinds were moderate, and a fair degree of buoyancy obtained. The sales were 4,000 hhds. Louisiana, 325 do. Texas, 14,000 do. and 8,400 bxs. Cuba, 4,600 hhds. Porto Rico, 637 do., 175 tcs. and 491 bbls. English Island, 9,665 bags Manilla, 3,311 do. and 193 cases Brazil and 4,500 hhds. Melado.

At the commencement of April, the arrivals from the West Indies became more frequent, buyers held off, and holders were compelled to yield or store, but a concession of one-eighth of a cent led to rather more business. The receipts, however, continued to be largely out of proportion to the wants of buyers, owners pressed sales from vessel, and values declined from day to day, until they stood at $\frac{1}{2}$ @ $\frac{5}{8}$ cent below the opening rates of the month; it must be remarked, however, that the depression and concession was wholly confined to medium and low grades; prime qualities, having been comparatively scarce, were firm, if not buoyant. The low points that prices had now touched brought forward buyers more freely, the market soon became animated, indeed excited, an extraordinary activity prevailed, with very large sales, and prices rallied, an advance of $\frac{1}{8}$ @ $\frac{1}{4}$ cent being realized. From this, until the end of the month, there continued to be a good steady demand, with some speculative action, and values further appreciated one-eighth of a cent, the advance generally being more marked on the better qualities, the wants of the trade being in excess of the receipts. The sales were 4,300 hhds. Louisiana, 500 do. Texas, 25,900 do. and 4,050 bxs. Cuba, 7,000 hhds. Porto Rico, 515 do., 65 tcs. and 291 bbls. English Island, 961 bags Siam and 5,300 hhds. Melado.

The activity noticed during the greater part of the month of April continued for the first week in May; refiners, the trade and speculators, bought freely, and with small receipts and a reduced stock, an additional advance of one-eighth of a cent was established; upon this, speculators retired, other buyers also having been well supplied by the recent large purchases, held off, and the market became dull. Sellers, now urged by more frequent arrivals, pressed their invoices at a reduction of one-eighth of a cent; for a few days there was but a moderate business, but refiners and the trade again entered, a speculative feeling was more prominent, this concession was regained, and soon followed by an advance of first an $\frac{1}{8}$, and then another $\frac{1}{8}$ @ $\frac{1}{4}$ cent, with free sales and an active and buoyant market; the encouraging harvest prospects having imparted to buyers

great confidence, large quantities being withdrawn for the Western markets. Toward the close, however, the purchases fell off, speculators suspended operations, the trade and refiners bought less freely, the market became rather unsettled, and a reduction of one-eighth of a cent was submitted to. The sales were 950 hhds. Louisiana, 500 do. Texas, 31,000 do., 9,100 bxs. and 227 bags Cuba, 7,900 hhds. Porto Rico, 289 do., 109 tcs. and 512 bbls. English Island, 19,246 bags Manilla, 17,950 do. Brazil and 3,400 hhds. Melado.

Continued large arrivals for the first few days in June exercised an unfavorable influence, and a softening in prices resulted, but refiners being compelled by their necessities to come forward, the market again assumed an active and buoyant appearance, and with large purchases also by the trade and speculators, prices soon ran up one-quarter of a cent, which had the effect to repress business, the buoyant feeling was lost, and, with it, an eighth of a cent of the recent advance, without leading to any activity; the receipts became large, the stock accumulated, and holders were compelled to recede another eighth of a cent, but still buyers held off. Toward the latter part of the month, however, there was rather more business, and though no advance was obtained, more tone was observable. Sales 470 hhds. Louisiana, 112 do. Texas, 25,600 do. and 9,500 bxs. Cuba, 6,600 hhds. Porto Rico, 115 do., 31 tcs. and 479 bbls. English Island, 332 tcs. Honduras, 9,665 bags Manilla, 7,044 do. Brazil and 4,500 hhds. Melado.

July opened with large receipts and only a moderate demand. Common and refining grades were weak, but good to prime qualities were scarce and wanted. The business was light until about the middle of the month, when there sprang up a good demand, which soon quickened into activity, and notwithstanding liberal arrivals, holders were enabled to realize an advance of one-eighth of a cent, but this did not check the inquiry; the dealings were still large, and a further appreciation of one-eighth of a cent on refining grades and one-quarter of a cent on grocery styles was obtained. Purchasers continued to operate notwithstanding these enhanced values, the impression being general that the bulk of the West India crop had come forward, and that the future supply would not be more than adequate to the wants of the country. There continued a fair business until about the latter part of the month, when the demand fell off. The receipts increased, and prices gradually gave way, until a decline of one-quarter of a cent was fully established. Sales 340 hhds. Louisiana, 31,400 do. and 15,500 bxs. Cuba, 9,200 hhds. Porto Rico, 92 do., 80 tcs. and 133 bbls. English Island, 112 do. Honduras, 2,598 bags Brazil and 1,100 hhds. Melado.

An improved demand was visible in the early part of August, and prices, though no higher, were steadier, with more tone generally. As the month advanced the business fell off, and though the offerings were not large, buyers were enabled to obtain a concession of one-eighth of a cent; this reduction, however, failed to stimulate business; stocks accumulated, the receipts were larger, and an additional decline of one-eighth of a cent was established, which induced rather more demand, but no general activity, the month closing with a languid feeling, akin to depression. Sales 140 hhds. Louisiana, 59 do. Texas, 20,600 do., 10,900 bxs. and 70 bags Cuba, 4,700 hhds. Porto Rico, 372 do., 35 tcs. and 1,173 bbls. English Island, 16 do. and 302 ceroon St. Domingo, 688 bags Penang and 1,326 hhds. Melado.

ARTICLES.	Port of New-York.	Other Ports.	Total U. S. 1899-00.	Year 1898-9.
Hewn timber,.....	.....	\$ 231,668	\$ 231,668	\$ 367,609
Other lumber,.....	\$ 260,797	444,322	705,119	1,001,216
Hides,.....	240,854	775,906	1,016,360	520,539
Hogs,.....No. 115	759	376,845	377,604	550,875
Horned cattle,..... 1,532	94,469	957,957	1,052,426	1,345,058
Horses,..... 907	110,161	123,207	233,368	290,250
Hops,.....lba. 145,298	17,847	15,519	32,866	53,016
Household furniture,.....	527,491	551,623	1,079,114	1,067,197
Ice,.....tons, 3,568	9,918	173,216	183,134	164,581
India rubber, manufactures of:				
Shoes,.....pairs, 98,964	51,005	7,821	58,826	52,006
Other than shoes,.....	119,583	62,432	182,015	146,821
Indian corn,....bush, 1,580,019	1,182,381	1,217,427	2,399,808	1,323,103
Indian meal,.....bbls. 86,073	346,430	565,645	912,075	994,269
Iron and manufactures of iron:				
Bar,.....	....	38,257	38,257	48,226
Casting,.....	....	282,848	282,848	128,659
Nails,.....lba. 2,467,930	88,577	100,177	188,754	188,223
Pig,.....cwt. 3,000	3,493	15,650	19,143	21,213
Manufactures of,.....	3,151,153	2,032,887	5,174,040	5,117,346
Jewelry, real or imitation of,...	18,020	6,639	24,659	58,353
Other manufactures of gold or silver,.....	139,207	980	140,187	35,947
Lard,.....lba. 18,542,131	2,075,348	2,470,483	4,545,831	3,268,406
Lard oil,.....galls. 28,585	26,428	29,355	55,783	50,793
Lead,.....lba. 154,579	8,595	41,751	50,446	28,575
Leather,..... 2,221,090	469,571	204,738	674,309	499,718
Leather, manufactures of:				
Boots and shoes, pairs, 239,151	241,291	541,234	782,525	820,175
Linseed oil,.....galls. 18,527	12,278	14,521	26,799	24,194
Manufactured tobacco, lba. 10,327,864	1,793,159	1,578,915	3,372,074	3,334,401
Manufactures of cotton, printed, White and other duck,.....	396,483	2,959,966	3,356,449	2,320,890
Duck,.....	88,978	1,314,528	1,403,506	1,302,381
Other manufactures of,.....	236,479	145,610	382,089	215,855
Manufactures of glass,.....	5,240,556	552,196	5,792,752	4,477,096
Manufactures of hemp, bags,...	97,114	180,884	277,948	252,316
" " cloth,...	....	4,733	4,733	5,439
" " thread,...	....	813	813	905
Other manufactures of,.....	430	....	430	444
Manufactures of marble and stone,.....	14,589	7,299	21,838	12,090
Manufactures of pewter and lead, Manufactures of tin,.....	39,911	136,328	176,239	112,214
Manufactures of wood,.....	35,197	10,884	46,081	28,782
Molasses,.....galls. 4,238	14,253	24,811	39,064	39,389
Morocco and leather not sold per pound,.....	794,868	1,908,227	2,703,095	2,339,861
Mules,.....No. 1,145	1,480	33,812	35,292	75,699
Musical instruments,.....	13,897	5,114	19,011	41,465
Oak bark and other dyewoods,...	122,675	35,405	158,080	258,336
	15,883	113,765	129,653	165,101
	65,435	98,825	164,260	412,701

cash; against first receipt in 1859 on the 3d, which brought 8½¢, quality fully fair. Sales 32 hhds. Louisiana, 30 do. Texas, 11,700 do., 69 bags and 9,800 bxs. Cuba, 850 hhds. Porto Rico, 13,201 bags and 598 cases Brazil, 40 bbls. and 621 ceroon St. Domingo and 444 hhds. Melado.

The gloom and depression that pervaded the market throughout November suffered no diminution during the first half of December; on the contrary, it seemed to be difficult to sell goods except at ruinous sacrifices. Prices were constantly in buyers' favor, and a further decline of ½¢ @ 1¢ a cent was established, making nearly 2 cents within a month, and had now touched a lower point than since 1854. Large shipments continued to be made from first hands, but the stolidity of buyers seemed immovable. Business was paralyzed, and the only purchases were small lots to meet the immediate wants of the trade and refiners. At this point, bullion began to flow in from Europe. Consequent upon this, the money market became easier, and exporters, attracted by the low prices, purchased quite freely, a more hopeful feeling was visible everywhere, and with returning confidence came a hardening tendency in the price of sugar. The trade, refiners and speculators entered the market, and prices recovered about ½¢ @ ¾¢ of a cent of the previous decline, the year closing with a disposition to greater cheerfulness, notwithstanding the threatening aspect of political affairs. Sales 1,820 hhds. Louisiana, 11,500 do. and 11,050 bxs. Cuba, 306 hhds. Porto Rico, 4,000 bags China, 6,307 do. Brazil and 719 hhds. Melado. Stock 34,178 tons, against a stock same time 1859 of 18,020 tons.

RANGE OF PRICES AT NEW-YORK, FOR THE YEARS 1859—1860.

1859.	New-Orleans.	Cuba Muscovado.	Porto Rico.	Havana, White.	Havana, Brown.	Manilla.	Brazil Brown.
January,	6 @ 8½	5½ @ 8	6½ @ 8½	9½ @ 10	6½ @ 9	7 @ 7½	6½ @ 7½
Feb.,...	6 @ 8½	6½ @ 8	7 @ 8½	9½ @ 10	7 @ 9½	— @ 7½	7 @ 7½
March,...	6 @ 8½	6 @ 7½	6½ @ 8	9½ @ 9½	6½ @ 9½	7½ @ —	7½ @ 7½
April,...	6½ @ 8	5½ @ 7½	6½ @ 8	9 @ 9½	6½ @ 9½	7½ @ —	7½ @ 7½
May,...	6 @ 8	5½ @ 7½	6½ @ 7½	8½ @ 9½	6 @ 8½	7 @ 7½	6½ @ 7
June,...	5½ @ 7½	5 @ 7½	5½ @ 7½	8½ @ 9½	5½ @ 9	7 @ 7½	6 @ 6½
July,...	5½ @ 7½	5½ @ 7½	5½ @ 7½	8½ @ 9½	5½ @ 8½	7 @ 7½	6 @ 6½
August,...	5½ @ 8	4½ @ 7½	5½ @ 8	8½ @ 9	5½ @ 8½	7 @ 7½	5½ @ 6½
Sept.,...	5½ @ 7½	5½ @ 7½	5½ @ 8	9 @ 9½	5½ @ 8½	....	5½ @ 6
Oct.,...	5½ @ 8	5½ @ 7½	6 @ 8	9 @ 9½	5½ @ 8½	....	5½ @ 6½
Nov.,...	6½ @ 8½	5½ @ 8	6 @ 8½	9 @ 9½	5½ @ 9	6½ @ 9½	6 @ 7
Dec.,...	6½ @ 8½	6½ @ 8½	6½ @ 8½	9½ @ 9½	6½ @ 9½	6½ @ 7	6½ @ 7½
Average for the year,...	\$ 7 02	\$ 6 61	\$ 7 11	\$ 9 24	\$ 7 46	\$ 7 15	\$ 6 61
1860.							
January,	7 @ 8½	6½ @ 8½	7 @ 8½	9½ @ 9½	6½ @ 9½	7 @ 7½	7 @ 7½
Feb.,...	7 @ 8½	6½ @ 8½	7 @ 8½	9 @ 9½	7 @ 9½	— @ 7½	7½ @ 7½
March,...	6 @ 8½	6 @ 8½	6½ @ 8½	9½ @ 9½	7½ @ 9	— @ 7	7½ @ 7½
April,...	5½ @ 8½	5½ @ 7½	6½ @ 8½	8½ @ 9½	7 @ 8½	6½ @ 6½	6½ @ 7
May,...	6 @ 8½	5½ @ 8	6 @ 8½	8½ @ 9½	6½ @ 8½	6½ @ 6½	6½ @ 6½
June,...	6½ @ 8½	6 @ 7½	6½ @ 8½	8½ @ 9½	6½ @ 8½	— @ 7	6½ @ 7½
July,...	6½ @ 8½	6½ @ 8	6½ @ 8½	8½ @ 9½	6½ @ 8½	— @ 7	6½ @ 7½
August,...	6½ @ 8½	6½ @ 8	6½ @ 8½	9 @ 9½	6½ @ 9	6½ @ 7	6½ @ 7½
Sept.,...	6½ @ 8½	6 @ 7½	6½ @ 8½	8½ @ 9½	6½ @ 8½	6½ @ 6½	6½ @ 7½
Oct.,...	6½ @ 8½	6 @ 7½	6½ @ 8½	8½ @ 9½	6½ @ 8½	6½ @ 6½	6½ @ 7½
Nov.,...	....	5 @ 7½	6½ @ 8½	8 @ 9	6½ @ 8½	6½ @ 6½	....
Dec.,...	4½ @ 7½	4 @ 6½	4½ @ 7½	7½ @ 8	5½ @ 7½	5 @ 5½	4½ @ 5½
Average for the year,...	\$ 7 36	\$ 6 83½	\$ 7 83½	\$ 8 91 4-5	\$ 7 68	\$ 6 67 7-10	\$ 6 85 1-5

MOLASSES TRADE OF THE UNITED STATES.

Annual Statement, showing the Import, Export, Stock and Consumption for the year ending December 31st, 1860, (exclusive of California and Oregon.)

From the Shipping and Commercial List, and New-York Price Current.

NEW-YORK STATEMENT—1860.

Year 1860. RECEIVED AT NEW-YORK FROM	Hhds.	Tca.	Bbla.	Total Gallons.
Cuba,	42,411	4,715	16,943	6,011,430
Porto Rico,	16,466	553	442	2,059,134
Barbadoes,	3,236	1	60	423,640
Trinidad Island,	52	..	..	5,998
Demerara,	6	..	..	790
Antigua,	140	15	..	17,760
St. Lucia,	18	..	7	2,372
St. Kitts,	34	..	..	4,023
Other West Indies,	151	..	..	18,040
Other foreign ports,	311	..	7	37,620
Total receipts of foreign, direct,	62,825	5,284	17,464	8,585,806
Received from Louisiana,	2	220	45,119	1,817,460
“ “ other coastwise ports,	5,606	389	13,964	1,198,405
Total receipts,	68,433	5,893	76,547	11,601,671
Add stock January 1, 1860,	4,028	..	1,213	532,670
Total supply,	72,461	5,893	77,760	12,134,341
Deduct export and shipments inland to Canada,	3,410	254	1,816	495,730
Deduct stock January 1, 1861,	69,051	5,639	75,944	11,638,621
Taken from this port for consumption,	5,654	..	3,081	802,102
Consumption, as above,	63,397	5,639	72,863	10,836,519
Consumption, as above,	galls. 10,836,519—Of which foreign, imported direct,			9,258,890
Total consumption of 1859,	12,010,290—Of which foreign, imported direct,			8,653,187
Decrease in 1860,	1,173,771	Increase in consumption of foreign, 1860,		605,703

NEW-YORK STATEMENT—1859.

Year 1859.	Hhds.	Tca.	Bbls.	Total Gallons.
RECEIVED AT NEW-YORK FROM				
Cuba,.....	51,884	5,165	14,930	7,119,247
Porto Rico,.....	11,033	304	547	1,420,673
Barbadoes,.....	4,265	2	148	568,760
Trinidad Island,.....	901	..	8	108,954
Demerara,.....	22	..	..	3,006
St. Domingo,.....	..	..	..	..
Antigua,.....	30	..	..	2,406
Anguilla, &c.,.....	34	..	..	3,972
Nevis,.....	..	..	..	..
Other foreign ports,.....	128	..	..	15,440
Total receipts of foreign, direct,.....	68,287	5,471	15,633	9,287,457
Received from Louisiana,.....	30	97	45,683	1,836,970
“ “ other coastwise ports,.....	7,632	633	14,549	1,480,620
Total receipts,.....	75,849	6,201	75,865	12,555,047
Add stock January 1, 1859,.....	4,314	..	2,641	621,863
Total supply,.....	80,163	6,201	78,506	18,376,910
Deduct exports and shipments inland to Canada,.....	4,242	176	2,974	633,950
Deduct stock January 1, 1860,.....	75,921	6,025	75,532	12,542,960
Taken from this port for consumption,.....	4,028	..	1,213	532,670
	71,893	6,025	74,319	12,010,290
Consumption, as above,.....galls.	12,010,290	—Of which foreign, imported direct,.....galls.		8,653,187
Total consumption of 1859,.....	11,239,635	—Of which foreign, imported direct,.....galls.		7,461,515
Increase in 1859,.....galls.	770,605	Increase in consumption of foreign,.....galls.		1,191,673

The statistics presented above show that the total receipts of foreign molasses into the United States for the year ending Dec. 31, 1860, were 31,126,015 gallons, against total receipts in 1859 of 28,960,175 gallons; and the consumption of foreign descriptions was 28,724,205 gallons, against a consumption in 1859 of 28,293,210 gallons; while the total consumption of foreign and domestic in 1860 was 47,318,877 gallons, against a total consumption in 1859 of 54,260,970 gallons, showing an increase in the consumption of foreign of 430,995 gallons, or over 1½ per cent., but a decrease in the consumption of all kinds of 6,942,093 gallons, or nearly 13 per cent.

The receipts and consumption of foreign in 1860 were much larger than before in several years, owing to the crop of domestic of 1859-60 being considerably below an average yield. The crop of Louisiana, &c., now coming forward, it is estimated will not be any larger than the previous season, and very probably will be considerably less. Of the receipts into the country the past year, about 60,000 hhds. have been taken by sugar refiners, 50,000 by distillers, and the remainder has been distributed among the trade, exporters, &c.

GENERAL STATEMENT—1860.

RECEIPTS OF FOREIGN IN THE UNITED STATES, FROM 1ST JANUARY TO 31ST DECEMBER.

Year 1860. RECEIVED AT	Hhds.	Tcs.	Bbbls.	Total Gallons.
New-York,.....	62,825	5,284	17,444	8,585,808
Boston—from Cuba,.....	38,784	4,494	3,409	4,988,855
“ “ Porto Rico,.....	1,088	115	56	187,141
“ “ Surinam,.....	3,053	135	115	364,490
“ “ other foreign ports,.....	698	..	59	86,140
Portland—from Cuba, &c.,.....	43,007	4,506	6,539	5,736,940
New-Haven—from Porto Rico, &c.,.....	10,093	209	170	1,305,816
Gloucester and Providence—from Cuba, &c.,	2,812	226	166	358,608
Newburyport and Salem—from Surinam,				
&c.,.....	477	2	12	55,614
Bristol, Warren and other eastern ports—				
from Cuba, &c.,.....	3,576	166	236	498,905
Philadelphia—from Cuba,.....	22,659	2,368	4,058	3,066,240
“ “ Porto Rico,.....	1,677	83	175	213,806
“ “ English Island, &c.,....	195	..	11	25,240
Baltimore—from Cuba,.....	5,110	725	7,690	932,228
“ “ Porto Rico,.....	1,404	5	8	171,690
“ “ English Island, &c.,.....	2,640	88	169	354,190
New-Orleans—from Cuba, Porto Rico, &c.,..	16,689	1,980	2,711	2,233,140
Savannah, Charleston and other southern				
ports—from Cuba, &c.,.....	15,155	1,446	4,789	2,111,880
Total receipts,.....	231,892	21,727	47,832	31,126,015
Add stock at all the ports, January 1, 1860,..	9,311	280	375	1,126,200
Total supply,.....	241,203	21,957	48,207	32,252,215
Deduct exports and shipments inland to				
Canada, from all the ports, in 1860,.....	8,749	1,261	3,241	1,263,890
	232,454	20,696	44,966	30,988,325
Deduct stock at all the ports, Jan. 1, 1861,..	16,420	224	1,160	2,264,120
Total consumption of foreign,.....	214,034	20,472	43,816	28,724,205
Total consumption of foreign, as above,.....galls.				28,724,205
Add crop of Louisiana, Texas, Florida, &c., of 1859-60, the most of which				
was distributed in 1860, and assuming the stock of this description				
1st of January of each year to be equal,.....				18,594,672
Would make the total consumption in 1860,.....galls.				47,318,877
Total consumption in 1859,.....				54,260,970
Decrease in 1860,.....galls.				6,942,093

GENERAL STATEMENT—1859.

Year 1859. RECEIVED AT	Hhds.	Tons.	Bbls.	Total Gallons.
New-York,.....	68,287	5,471	15,633	9,237,457
Boston—from Cuba,.....	39,042	4,259	4,823	5,150,715
" " Porto Rico,.....	1,088	77	77	141,318
" " Surinam,.....	2,120	87	89	252,840
" " other foreign ports,.....	1,906	28	276	240,180
Portland—from Cuba, &c.,.....	46,763	4,835	1,919	6,006,320
New-Haven—from Porto Rico, &c.,.....	10,942	216	636	1,179,608
Gloucester and Providence—from Cuba, &c.,	8,172	259	164	401,850
Newburyport and Salem—from Surinam,				
&c.,.....	534	42	17	65,320
Bristol, Warren and other eastern ports—				
from Cuba, &c.,.....	3,924	320	573	508,025
Philadelphia—from Cuba,.....	12,135	1,361	3,973	1,639,190
" " Porto Rico,.....	573	40	..	72,430
" " English Island, &c.,....	224	..	4	29,100
Baltimore—from Cuba,.....	6,917	1,341	1,492	965,070
" " Porto Rico,.....	781	32	136	100,832
" " English Island, &c.,.....	847	12	77	112,825
New-Orleans—from Cuba,.....	2,819	608	1,767	441,520
Savannah, Charleston and other southern				
ports—from Cuba, &c.,.....	17,911	1,286	4,056	2,379,120
Total receipts,.....	219,974	20,274	35,701	28,969,175
Add stock at all the ports, January 1, 1859,..	16,013	336	1,074	1,380,806
Total supply,.....	235,987	20,660	36,775	30,799,480
Deduct exports and shipments inland to				
Canada, from all the ports, in 1859,.....	9,251	1,581	4,778	1,330,070
	226,736	19,079	31,997	29,419,410
Deduct stock at all the ports, Jan. 1, 1860,...	9,811	230	375	1,126,200
Total consumption of foreign,.....	217,425	18,849	31,622	28,293,210
Consumption of foreign, as above,.....galls.				28,293,210
Add crop of Louisiana, Texas, Florida, &c., of 1858-59, the most of which				
was distributed in 1859, and assuming the stock of this description 1st				
January of each year to be equal,.....				25,967,760
Would make the total consumption in 1859,.....galls.				54,360,970
Total consumption in 1858,.....				45,169,164
Increase in 1859,.....galls.				9,091,806

TOTAL CONSUMPTION IN THE UNITED STATES IN

	Gallons.		Gallons.
1860,.....	47,818,877	of which, foreign,.....	23,724,205
1859,.....	54,360,970	" " 	28,293,210
1858,.....	45,169,164	" " 	24,795,374
1857,.....	28,508,784	" " 	23,266,404
1856,.....	39,608,878	" " 	23,014,378
1855,.....	47,966,035	" " 	23,633,423
1854,.....	56,493,019	" " 	24,437,019
1853,.....	55,536,321	" " 	23,576,321
1852,.....	48,257,511	" " 	29,417,511
1851,.....	43,943,018	" " 	33,238,278
1850,.....	37,019,249	" " 	24,806,949

East Indies generally, the quantity gathered increases very slowly, if at all; indeed, in some parts of the East, we understand that the cultivation of the plant has, in many instances, been abandoned for that of the sugar cane, the latter being considered much the surest and most profitable crop. The crop of Brazil fluctuates largely, but for the past five years there has been rather a diminution than an increase. St. Domingo seems to be at a stand, and the only countries which increase their exports of this article, to any considerable extent, are Venezuela and the Island of Ceylon.

The consumption of the United States the past year, as we have seen, has been—say 79,250 tons—and that of Great Britain and the Continent is estimated at 195,000 @ 200,000 tons, making a total consumption in 1860 in Europe and the American States of about 275,000 tons. The consumption of this country has been increasing for ten years at the average annual rate of about 4 per cent., and that of Europe at over 3 per cent.

These figures are not barren of thought to the statistical student, evidencing, as they do, that the time must arrive, and that it cannot be far distant, when the consumption of the world must overtake its production. The question to be solved must be, to what altitude must prices attain in order to check the consumption and equalize the supply and demand? There are those whose opinion are entitled to weight, who advance the view that that point has been already touched, pointing to the fact that the importation at the principal ports of Europe, taken as a whole, the past year, have been insufficient for their consumptive wants, the year closing with a considerably reduced stock, and that after deducting the exports from the United States, a similar state of things is witnessed here; and to this cause may be attributed the continually advancing prices of the past few years, the effect of which is seen, as far as this country is concerned, in the serious decline in the deliveries for consumption, attended with a vigorous search for and increased sale of cheaper substitutes.

The annexed statement shows the receipts and consumption for the past eleven years:

	<i>Receipts.</i>	<i>Consumption.</i>		<i>Receipts.</i>	<i>Consumption.</i>
1860,..... lbs.	185,779,689	177,530,623	1854,..... lbs.	182,473,853	179,481,083
1859,.....	248,527,306	223,882,850	1853,.....	193,112,300	175,687,790
1858,.....	227,656,186	251,255,099	1852,.....	205,542,855	204,991,595
1857,.....	217,871,839	172,565,934	1851,.....	216,043,870	181,225,700
1856,.....	230,913,150	218,225,490	1850,.....	152,580,310	134,539,730
1855	238,914,533	218,378,287			

larger, the demand fell off, and a feeling of depression ensued, though no decline was submitted to, holders, generally, not pressing their stocks.

The market in July was generally very dull; holders were more disposed to sell, and, upon making concessions, a moderate business was transacted. The wants of buyers, however, were soon satisfied, and at the close there was a heavy feeling, with prices still in buyers' favor.

August opened with an improved demand, and more steadiness was observable; but the business soon fell off, and as the receipts were in excess of the sales, prices for all but prime grades became weak. Towards the close, however, the rise which occurred at this time in grain, brought in distillers more freely, and prices again stiffened.

Distillers and refiners operated pretty freely in September, and the qualities suitable for their purposes remained very firm, but no change in prices occurred, the demand being met by holders. Towards the latter part of the month, prime grades also were in better request, and the market generally assumed a firm aspect.

The market throughout October remained quite steady and uniform. Grocery styles sold most freely, but a fair business in all grades was transacted at full prices. The first arrival of new crop New-Orleans occurred on the 30th, and sold at 52 cents, quality not prime, against first receipts in 1859 on the 13th November, which brought 52; 1858, 45, and 1857, 60 cents.

November opened with a very quiet market; the low grades were neglected, and prime qualities only purchased in small lots. As the month advanced, the market became very seriously affected by the political panic, and prices rapidly fell off. But little business was done, except for cash, and values were constantly in buyers' favor, the decline on New-Orleans being about 10 @ 12 cents per gallon, foreign descriptions generally sympathizing and receding. At the close, the low prices brought exporters, and some considerable sales of Muscovado were made for export at 21 @ 23 cents.

The unsettled state of feeling noted in November continued for the first half of the month of December, and, with free receipts of New-Orleans, prices still declined, a further concession of 2 @ 3 cents being made, the bulk of the business, however, being done through the auction rooms. The frequent large public sales soon made considerable inroads upon the stock, and, with a somewhat improved state of financial affairs, the turn of the market was in sellers' favor. Towards the close of the month exporters again purchased pretty freely of Cuba for shipment, and though foreign was still dull, yet there was less depression than before, the year closing with an improved and more hopeful feeling.

We annex the following table, showing the range of prices of the leading descriptions at this port the past four years :

THE RANGE OF PRICES AT NEW-YORK THE PAST FOUR YEARS.

Months.	1860.			
	New-Orleans.	Porto Rico.	Cuba Muscovado.	Cuba Clayed.
January,.....	50 @ 53	30 @ 40	26 @ 33	22 @ 25
February,.....	44 @ 50	30 @ 40	24 @ 32	24 @ 26
March,.....	43 @ 50	30 @ 41	25 @ 32	24 @ 26
April,.....	43 @ 50	35 @ 41	26 @ 34	23 @ 28
May,.....	45 @ 50	35 @ 41	26 @ 36	21 @ 28
June,.....	46 @ 50	34 @ 40	25 @ 35	22 @ 26
July,.....	45 @ 49	30 @ 38	24 @ 33	21 @ 24
August,.....	45 @ 50	32 @ 40	24 @ 32	20 @ 24
September,.....	45 @ 49	32 @ 40	24 @ 32	20 @ 23
October,.....	45 @ 50	32 @ 40	25 @ 33	21 @ 23
November,.....	40 @ 53	30 @ 39	21 @ 30	17 @ 23
December,.....	30 @ 40	25 @ 36	17 @ 24	15 @ 19
Average for the year,	46½ c.	35 8-10 c.	28 c.	22½ c.

Months.	1859.			
	New-Orleans.	Porto Rico.	Cuba Muscovado.	Cuba Clayed.
January,.....	37 @ 42	23 @ 33	21 @ 28	19 @ 26
February,.....	39 @ 42	24 @ 34	22 @ 32	25 @ 27
March,.....	38 @ 40	30 @ 38	25 @ 32	23 @ 26
April,.....	38 @ 40	30 @ 37	25 @ 32½	23 @ 25½
May,.....	38 @ 45	30 @ 42	25 @ 35	24 @ 30
June,.....	36 @ 45	27 @ 37	25 @ 34	21 @ 26
July,.....	38 @ 44	27 @ 36	23 @ 30	21 @ 24
August,.....	38 @ 43	25 @ 35	21 @ 30	18½ @ 22
September,.....	38 @ 42	25 @ 35	21 @ 30	18 @ 23
October,.....	37 @ 45	25 @ 36	22 @ 30	20 @ 24
November,.....	38 @ 52	27 @ 38	24 @ 30	21 @ 25
December,.....	50 @ 53	30 @ 39	25 @ 31	22 @ 25
Average for the year,	41½ c.	31½ c.	27½ c.	23½ c.

Months.	1858.			
	New-Orleans.	Porto Rico.	Cuba Muscovado.	Cuba Clayed.
January,.....	26 @ 35	25 @ 30	21 @ 25	18 @ 20
February,.....	25 @ 30	24 @ 28	19 @ 23	18 @ 21
March,.....	28 @ 33	28 @ 33	22 @ 28	21 @ 23
April,.....	33 @ 36½	30 @ 35	23 @ 31	21 @ 23½
May,.....	35½ @ 37	26 @ 33½	23 @ 32	22 @ 23
June,.....	35½ @ 37	26 @ 33	22 @ 30	22 @ 23
July,.....	38 @ 40	26 @ 34	25 @ 32	22 @ 23
August,.....	45 @ 50	35 @ 43	30 @ 35	28 @ 30
September,.....	50 @ 52	31 @ 41	29 @ 35	26 @ 28
October,.....	37½ @ 48	27 @ 38	24 @ 32	22 @ 27
November,.....	— @ 45	25 @ 33	22 @ 28	20 @ 22
December,.....	35 @ 40	25 @ 34	20 @ 27	17 @ 22
Average for the year,	38½ c.	31 c.	26½ c.	22½ c.

MONTHS.	1857.			
	New-Orleans.	Porto Rico.	Cuba Muscovado.	Cuba Clayed.
January,	— @ 80	57 @ 62½	44 @ 52	38 @ 40
February,	75 @ 76	65 @ 70	48 @ 60	50 @ 55
March,	75 @ 76	57 @ 68	45 @ 58	40 @ 46
April,	74 @ 76	55 @ 68	48 @ 63	44 @ 52
May,	75 @ 77	60 @ 70	54 @ 63	50 @ 52
June,	70 @ 75	60 @ 67½	50 @ 60	49 @ 52
July,	70 @ 75	55 @ 67	50 @ 60	46 @ 52
August,	65 @ 70	46 @ 62½	45 @ 50	37 @ 44
September,	45 @ 55	35 @ 53	29 @ 45	30 @ 35
October,	40 @ 55	22 @ 45	22½ @ 35	18 @ 30
November,	35 @ 45	23 @ 35	20 @ 27½	19 @ 22
December,	33 @ 37½	22 @ 30	19 @ 25	17 @ 20
Average for the year,	64 c.	52 c.	44½ a.	39 c.

Of the New-Orleans sugar crop for 1860, the New-Orleans *Price Current* says: We have compiled from our records the annexed statement of the sugar product of Louisiana for the past twenty-six years, showing the amount of each year's crop in hogsheads and pounds, with the gross average value per hoghead and total.

YEAR.	TOTAL CROP.		Average price per hhd.	Total value.
	Hhds.	Pounds.		
1834,	100,000	100,000,000	\$ 60 00	\$ 6,000,000
1835,	30,000	30,000,000	90 00	2,700,000
1836,	70,000	70,000,000	60 00	4,200,000
1837,	65,000	65,000,000	62 50	5,062,500
1838,	70,000	70,000,000	62 50	4,375,000
1839,	115,000	115,000,000	50 00	5,750,000
1840,	87,000	87,000,000	55 00	4,785,000
1841,	90,000	90,000,000	40 00	3,600,000
1842,	140,000	140,000,000	42 50	4,750,000
1843,	100,000	100,000,000	60 00	6,000,000
1844,	200,000	200,000,000	45 00	9,000,000
1845,	186,650	186,650,000	55 00	10,266,750
1846,	140,000	140,000,000	70 00	9,800,000
1847,	240,000	240,000,000	40 00	9,600,000
1848,	220,000	220,000,000	40 00	8,800,000
1849,	247,928	247,928,000	50 00	12,396,150
1850,	211,803	211,194,000	60 00	12,678,180
1851,	236,547	257,138,000	50 00	11,827,350
1852,	321,931	368,129,000	48 00	15,452,688
1853,	449,324	495,156,000	35 00	15,726,340
1854,	346,635	385,726,000	52 00	18,025,020
1855,	231,427	254,569,000	70 00	16,199,890
1856,	73,976	81,373,000	110 00	8,137,860
1857,	279,697	307,666,700	64 00	17,900,608
1858,	362,296	414,796,000	69 00	24,998,424
1859,	221,840	255,115,750	82 00	18,190,880
Total,	4,836,549	5,174,382,450	....	\$ 266,321,140

COMMERCE OF NEW-YORK.

FISCAL YEAR 1859-60.

Imports at the several ports of entry of the State of New-York, during the fiscal year 1859-60, compared with the totals of the preceding year ending 30th June, 1859.

Districts.	Free of duty.	Year ending 30th June, 1860.		June 30, 1859.
		Paying duty.	Total value.	
Sackett's Harbor,....	\$ 7,768	\$ 171	\$ 7,939	\$ 9,910
Genesee,.....	717,441	2,010	719,451	353,795
Oswego,.....	4,866,762	10,227	4,876,989	3,637,709
Niagara,.....	2,148,931	23,684	2,172,615	1,019,944
Buffalo,.....	2,627,085	50,654	2,677,739	1,669,845
Oswegatchie,.....	959,768	14,385	974,153	1,017,381
New-York,.....	30,837,251	203,355,690	233,692,941	218,231,093
Champlain,.....	2,502,641	36,341	2,538,982	2,360,984
Cape Vincent,.....	824,968	4,100	829,068	880,788
Total State N. York,.	\$ 44,992,615	\$ 203,497,262	\$ 248,489,877	\$ 229,181,349
Other ports,.....	37,298,999	76,377,378	113,676,377	109,586,781
Total United States,.	\$ 82,291,614	\$ 279,874,640	\$ 362,166,254	\$ 338,768,130

Statement of goods, wares and merchandise of the growth, produce and manufacture of the United States, exported from the several ports of entry of the State of New-York, during the fiscal year 1859-60, compared with the totals of the preceding year ending 30th June, 1859.

Districts.	Articles manufactured.	Other articles raw.	Total year 1859-60.	Total year 1859 59.
Sackett's Harbor,....	\$ 1,250	\$ 220	\$ 2,886	\$ 3,106
Genesee,.....	8,459	32,124	236,710	166,156
Oswego,.....	179,052	18,264	1,488,226	1,732,582
Niagara,.....	139,250	70,245	1,686,755	1,734,405
Buffalo,.....	2,195	3,182	616,100	773,312
Oswegatchie,.....	10,404	....	223,705	356,251
New-York,.....	444,974	640,806	120,630,955	97,461,676
Champlain,.....	80,694	30,897	997,296	2,150,431
Cape Vincent,.....	41,200	7,315	178,334	348,727
Total State N. York,.	\$ 907,478	\$ 802,553	\$ 126,060,967	\$ 104,726,546
Other ports,.....	1,489,967	552,838	247,128,307	231,167,839
Total United States,.	\$ 2,397,445	\$ 1,355,391	\$ 373,189,274	\$ 335,894,385
Foreign exports,.....	....	....	26,938,022	20,895,077
Totals,.....	....	....	\$ 400,122,296	\$ 356,789,462

FOREIGN EXPORTS OF NEW-YORK.

Foreign Exports from the Port of New-York, compared with the aggregate of all other Ports, during the fiscal year ending June 30, 1860, with total Exports of the United States for the year 1858-9.

ARTICLES.	Year 1859-60.			Year 1858-9.
	Port of New-York.	Other Ports.	Total U. S. 1859-60.	
Adamantine and other candles, lbs. 1,815,349	\$ 278,767	\$ 434,932	\$ 708,699	\$ 671,750
Apples,.....bbls. 12,645	53,751	152,304	206,055	99,803
Artificial flowers,.....	104	103	207	212
Ashes, pot and pearl, cwt. 97,204	537,702	285,118	822,820	643,861
Beef,.....fcs. 67,389 }	1,898,643	775,581	2,674,324	2,188,056
“.....bbls. 37,027 }				
Beer, ale, porter and cider:				
In casks,.....galls. 126,815	23,984	7,387	31,371	55,675
In bottles,.....doz. 8,666	14,028	8,174	22,202	22,551
Biscuit, or ship bread, bbls. 57,624 }	240,165	238,575	478,740	512,910
“ kegs and boxes, 24,591 }				
Billiard tables and apparatus, ..	5,867	10,612	15,979	12,094
Boards, plank and scantling, M. feet, 26,198	592,834	2,185,085	2,777,919	3,317,298
Books and maps,.....	154,870	123,398	278,268	319,080
Bricks, lime and cement,.....	60,482	93,503	154,045	160,611
Brooms and brushes of all kinds, ..	40,702	20,675	61,377	44,638
Butter,.....lbs. 4,725,146	708,418	437,908	1,144,321	750,911
Buttons,.....	1,602	997	2,599	8,399
Cable and cordage, cwt. 15,242	139,125	107,447	246,572	320,435
Carriages, R. R. cars, and parts thereof,.....	440,507	376,466	816,973	655,600
Cheese,.....lbs. 14,410,717	1,448,454	123,176	1,565,630	649,302
Chocolate,.....	845	1,748	2,593	2,444
Clover seed,.....bush. 70,416	844,415	252,504	596,919	536,781
Coal,.....tons, 59,518	245,144	495,639	740,783	658,536
Combs,.....	18,092	2,654	20,746	37,608
Copper and brass, manufac. of, ..	1,425,062	239,060	1,664,122	1,048,246
Cotton, bales,....No. 226,386 }	12,439,953	179,366,572	191,806,555	161,434,923
“ Sea Island, lbs. 5,594,093 }				
“ other,..... 97,746,662 }				
Drugs and medicines,.....	892,809	223,646	1,115,455	796,008
Earthen and stoneware,.....	40,142	24,944	65,086	47,261
Flax seed,.....bush. 2,652	3,695	115	3,810	8,177
Fire engines,.....	2,638	7,310	9,948	3,213
Fish, dried or smoked, cwt. 61,257	198,472	491,616	690,088	642,901
“ pickled,.....bbls. 14,196	85,205	106,429	191,634	203,760
Ginseng,.....lbs. 395,659	295,646	120	295,766	54,204
Gold and silver coin,.....	22,749,036	3,284,642	26,033,678	24,172,442
Gold and silver bullion,.....	27,589,901	3,323,272	30,913,173	33,329,863
Gunpowder,.....lbs. 1,351,223	196,585	271,187	467,772	371,603
Hams and bacon, .. 16,161,749	1,558,946	714,822	2,273,768	1,263,042
Hats, of fur or silk,.....	4,449	114,321	118,770	145,226
“ of palm leaf,.....	67,588	25,244	92,832	71,478
Hemp,.....tons, 7	998	8,538	9,531	9,279

ARTICLES.	Port of New-York.	Other Ports.	Total U. S. 1859-60.	Year 1858-9.
Hewn timber,.....	....	\$ 231,668	\$ 231,668	\$ 367,609
Other lumber,.....	\$ 260,797	444,822	705,119	1,001,216
Hides,.....	240,854	776,906	1,016,260	520,539
Hogs,.....No. 115	759	876,845	877,604	550,875
Horned cattle,..... 1,532	94,469	957,957	1,052,426	1,345,068
Horses,..... 907	110,161	123,207	233,368	290,250
Hops,.....lbs. 145,298	17,347	15,619	32,866	53,016
Household furniture,.....	527,491	551,623	1,079,114	1,067,197
Ice,.....tons, 3,568	9,918	173,216	183,134	164,581
India rubber, manufactures of:				
Shoes,.....pairs, 98,964	51,005	7,821	58,826	52,006
Other than shoes,.....	119,583	62,432	182,015	146,821
Indian corn,....bush. 1,580,019	1,182,381	1,217,427	2,399,808	1,323,103
Indian meal,.....bbls. 86,073	346,480	565,645	912,075	994,269
Iron and manufactures of iron:				
Bar,.....	....	38,257	38,257	48,226
Casting,.....	....	282,848	282,848	128,659
Nails,.....lbs. 2,487,980	88,577	100,177	188,754	188,223
Pig,.....cwt. 3,000	3,493	15,650	19,143	21,213
Manufactures of,.....	3,151,153	2,022,887	5,174,040	5,117,346
Jewelry, real or imitation of,...	18,020	6,689	24,659	58,353
Other manufactures of gold or silver,.....	139,207	980	140,187	35,947
Lard,.....lbs. 18,542,131	2,075,348	2,470,483	4,545,831	3,268,406
Lard oil,.....galls. 28,585	26,428	29,355	55,783	50,793
Lead,.....lbs. 154,579	8,695	41,751	50,446	23,575
Leather,..... 2,221,090	469,571	204,738	674,309	499,718
Leather, manufactures of:				
Boots and shoes, pairs, 239,151	241,291	541,234	782,525	820,175
Linseed oil,.....galls. 18,527	12,278	14,521	26,799	34,194
Manufactured tobacco, lbs. 10,327,364	1,793,159	1,573,915	3,372,074	3,324,401
Manufactures of cotton, printed, 396,483	2,959,966	3,356,449	2,320,890	2,320,890
White and other duck,..... 88,978	1,314,528	1,408,506	1,302,381	1,302,381
Duck,..... 236,479	145,610	382,089	216,855	216,855
Other manufactures of,..... 5,240,556	552,196	5,792,752	4,477,096	4,477,096
Manufactures of glass,..... 97,114	180,834	277,948	252,316	252,316
Manufactures of hemp, bags,....	....	4,733	4,733	5,439
" " cloth,....	....	813	813	905
" " thread,....	430	....	430	444
Other manufactures of,..... 14,539	7,299	21,838	12,090	12,090
Manufactures of marble and stone,.....	39,911	136,828	176,239	112,214
Manufactures of pewter and lead, 35,197	10,884	46,081	23,782	23,782
Manufactures of tin,..... 14,253	24,311	39,064	39,289	39,289
Manufactures of wood,..... 794,868	1,908,227	2,703,095	2,333,861	2,333,861
Molasses,.....galls. 4,238	1,480	33,812	35,292	75,699
Morocco and leather not sold per pound,.....	13,897	5,114	19,011	41,465
Mules,.....No. 1,145	122,675	35,405	158,080	253,336
Musical instruments,..... 15,888	113,765	129,653	155,101	155,101
Oak bark and other dyewoods, 65,435	98,255	164,260	412,701	412,701
Oil cake,..... 1,164,841	444,487	1,609,328	1,198,581	1,198,581
Oil, spermaceti, galls. 1,328,368	1,781,071	8,018	1,789,089	1,737,734
" whale and other fish, galls. 548,253	274,444	263,103	537,547	598,762
Whalebone, lbs. 1,068,888	896,236	57	896,293	1,233,539
Onions,..... 49,964	59,897	109,861	100,669	100,669
Paints and varnish,..... 145,562	78,247	223,809	185,068	185,068

ARTICLES.	Port of New-York.	Other Ports.	Total U. S. 1860-66.	Year 1868-9.
Paper and other stationery,....	\$ 152,916	\$ 132,863	\$ 285,798	\$ 299,857
Pork,.....tierces, 1,519 }	1,694,678	1,437,635	3,132,313	3,355,746
“bbla 107,815 }				
Potatoes,.....bush. 189,921	138,563	146,110	284,673	284,111
Printing presses and type,.....	138,740	18,384	157,124	68,863
Quicksilver,.....	....	258,682	258,682	....
Rice,.....tierces, 28,723 }	1,009,409	1,557,990	2,567,399	2,207,148
“bbla 33,853 }				
Rosin and turpentine, bbla 555,360	1,344,183	474,055	1,818,238	2,248,381
Rye meal,..... 5,010	21,135	26,987	48,172	60,786
Rye, oats and other small grain and pulse,.....	484,597	573,707	1,058,304	1,181,170
Saddlery,.....	50,667	20,665	71,332	58,870
Salt,.....bush. 47,671	9,331	120,386	129,717	212,710
Sheep,.....	12,874	20,739	33,613	41,182
Shingles,.....M. 2,858	38,970	130,576	169,546	191,531
Skins and furs,.....	1,394,922	133,236	1,528,208	1,361,352
Snuff,.....lbs. 20,837	3,436	7,918	11,354	68,090
Soap,..... 2,768,621	230,650	263,755	494,405	466,215
Spermaceti candles, 134,899	44,641	7,183	51,829	46,278
Spirits from grain, galls. 296,944	127,576	184,019	311,595	273,576
Spirits from molasses, 973,252	321,302	609,342	930,644	760,889
Spirits from other material, galls. 300,435	145,481	73,718	219,199	188,746
Spirits of turpentine, 2,800,553	1,330,479	585,810	1,916,289	1,306,035
Staves and heading, ...M. 33,877	1,327,186	1,038,330	2,365,516	2,410,334
Sugar, brown,.....	....	103,244	103,244	196,935
“ refined,....lbs. 102,377	10,337	291,337	301,674	377,944
Tallow,..... 8,634,418	904,647	693,529	1,598,176	712,551
Tar and pitch,.....bbla 29,739	75,864	75,540	151,404	141,058
Tobacco, leaf,....hhds. 11,955 }	1,882,255	14,024,292	15,906,547	21,074,038
“ “cases, 12,185 }				
“ “bales, 11,771 }				
Trunks and valises,.....	39,720	10,464	50,184	42,153
Umbrellas, parasols and sun- shades,.....	2,310	2,052	4,362	4,837
Vinegar,.....galls. 119,335	14,286	27,082	41,368	35,156
Wax,.....lbs. 323,108	120,506	11,297	131,803	94,850
Wearing apparel,.....	215,606	309,569	525,175	470,613
Wheat,.....bush. 1,880,903	2,336,190	1,740,514	4,076,704	2,849,192
Wheat flour,....bbls. 1,187,200	6,639,996	8,808,511	15,448,507	14,433,591
Wool,.....lbs. 79,408	18,311	371,201	389,512	355,563
Total, 1860,.....	120,630,955	252,558,319	373,189,274	335,894,385
“ 1859,.....	97,461,576	238,432,809	335,894,385	
“ 1858,.....	83,403,564	210,354,715	293,758,279	
“ 1857,.....	111,029,083	227,955,982	338,985,065	
“ 1856,.....	98,763,197	211,823,133	310,586,330	

Imports and Exports of each State, 1866-7, 1867-8, 1868-9, 1869-70.

The following table will illustrate fully the comparative foreign import and export trade of the State of New-York compared with the other States of the Union, for each year from July 1, 1866, to June 30, 1869.

STATES.	1866-1867.		1867-1868.		1868-1869.		1869-1860.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
New-York,.....	\$ 286,498,485	\$ 184,808,298	\$ 178,475,736	\$ 108,840,994	\$ 229,181,249	\$ 117,539,825	\$ 248,489,877	\$ 145,555,449
Maine,.....	2,664,333	8,718,586	1,558,999	2,962,059	2,157,086	8,240,889	1,716,075	8,669,555
New-Hampshire,.....	17,556	1,834	17,861	1,800	23,227	9,793	18,055	8,325
Vermont,.....	2,709,198	645,470	2,196,088	965,666	1,802,668	1,186,566	2,781,857	783,702
Massachusetts,.....	47,265,841	30,146,012	42,312,420	22,462,377	48,184,530	18,168,818	41,187,582	17,003,277
Rhode Island,.....	515,492	652,351	487,316	421,346	1,819,068	310,813	495,982	220,896
Connecticut,.....	1,116,801	1,095,408	955,105	1,830,241	491,067	1,144,311	1,419,726	743,181
New-Jersey,.....	8,867	12,184	6,618	14,091	5,046	21,988	5,423	89,343
Pennsylvania,.....	17,865,249	7,184,432	12,992,215	6,086,411	14,620,381	5,875,226	14,684,279	5,628,327
Delaware,.....	2,895	117,276	2,321	106,571	529	49,511	2,001	87,426
Maryland,.....	10,581,208	13,706,335	8,980,157	10,442,616	9,713,921	9,286,399	9,784,773	9,001,600
District of Columbia,.....	116,338	29,735	26,520	16,710	.....	.....	8,278	4,413
Virginia,.....	1,580,154	7,243,709	1,079,056	7,276,800	1,116,193	6,792,182	1,396,249	5,858,024
North Carolina,.....	231,494	414,206	174,272	641,216	1,168,845	435,408	365,981	760,094
South Carolina,.....	2,019,786	16,140,408	2,071,519	16,924,436	1,438,535	17,972,580	1,589,670	21,205,337
Georgia,.....	779,909	10,857,634	411,850	9,697,559	624,165	15,562,154	782,081	18,488,088
Alabama,.....	708,090	20,576,229	606,942	21,092,149	788,164	28,938,663	1,050,810	38,670,183
Florida,.....	9,187,414	14,435,901	8,989,733	15,089,247	11,163,563	15,919,188	9,580,868	10,296,002
California,.....	321,099	8,263,552	164,950	1,887,552	286,971	8,192,362	386,981	1,330,230
Illinois,.....	326,325	1,885,494	222,860	1,713,077	98,588	1,269,365	60,214	1,163,133
Louisiana,.....	24,891,967	91,894,563	19,586,083	88,375,995	18,849,516	101,666,588	22,922,778	106,417,788
Michigan,.....	1,018,568	1,502,608	672,934	5,188,707	1,067,339	3,624,624	976,179	8,826,932
Minnesota,.....	.....	51,140	.....	.....	.....	.....	.....	.....
Oregon,.....	5,020	3,907	39,577	9,935	2,097	5,000	1,936	113,126
Ohio,.....	267,265	983,989	199,293	389,561	267,846	288,011	259,584	284,810
Texas,.....	800,774	1,491,875	118,091	2,428,465	468,162	8,865,909	2,436,408	6,788,984
Washington Territory,.....	3,717	25,805	12,717	265,701	.....	444,352	.....	.....
Wisconsin,.....	5,817	622,044	106,804	543,280	28,946	699,088	3,425	187,111
Totals,.....	\$ 880,890,141	\$ 862,960,862	\$ 282,613,150	\$ 924,644,490	\$ 838,768,130	\$ 866,789,463	\$ 892,166,254	\$ 400,123,296

COFFEE TRADE OF THE UNITED STATES.

Annual Statement, showing the Import, Export, Stock and Consumption, for the year ending December 31, 1860, (exclusive of California and Oregon.)

From the Shipping and Commercial List, and New-York Price Current.

NEW-YORK STATEMENT.

1860.						1859.					
RECEIVED AT NEW-YORK.	Bags.	Pockets, Mats, &c.	Casks.	Bbls.	Total lbs.	Bags.	Pockets, Mats, &c.	Casks.	Bbls.	Total lbs.	
From Brazil,.....	292,595	.....	..	..	46,544,920	874,167	.....	1	..	59,882,900
St. Domingo,.....	77,494	.....	..	..	10,068,115	82,654	.....	..	..	10,745,120
Java and Sumatra,.....	166	27,519	.....	..	1,538,949	39	71,715	.....	..	4,140,469
Singapore,.....	678	4,258	.....	..	382,925	90	11,325	.....	..	561,001
Manilla,.....	.....	769	.....	..	27,551	.....	4,670	.....	..	208,873
Ceylon,.....	18,559	.....	..	8	1,769,660	10,670	.....	9	19	1,869,150
Maracaibo,.....	44,500	.....	..	..	5,783,126	57,182	.....	.....	..	7,427,100
Laguaira and Por- to Cabello,.....	17,046	.....	..	..	1,874,220	43,330	.....	.....	..	4,767,140
Jamaica,.....	14,850	.....	80	612	2,625,220	10,207	.....	80	628	1,618,860
Cuba,.....	16	.....	4	16	8,780	249	.....	..	9	47,810
Porto Rico,.....	2,741	.....	..	11	660,326	250	.....	..	2	38,028
Bolivar City,.....	.....	.....	..	..	.....	176	.....	.....	..	19,110
Santa Martha, &c.,.....	8,374	.....	..	..	872,020	2,766	.....	.....	..	804,340
Costa Rica and N. Grenada,.....	4,696	.....	..	1	517,420	5,543	.....	.....	..	620,945
Rotterdam,.....	2,863	.....	..	..	886,710	721	.....	25	..	109,920
Amsterdam,.....	1,638	.....	..	..	207,520	2,212	.....	.....	..	298,885
Africa,.....	12	.....	..	..	1,261	2	.....	.....	..	223
Other foreign ports,.....	686	.....	5	12	81,561	2,770	.....	8	1	850,620
Total foreign,....	476,714	32,589	89	860	72,790,877	592,966	87,610	73	654	92,845,946	
Received coastwise from—											
Eastern ports,.....	10,737	7,965	..	..	1,808,690	18,818	82,380	..	..	4,062,500
Southern ports,.....	12,951	.....	..	..	1,558,060	40,767	.....	9	52	4,905,840
Total receipts,....	500,392	40,504	89	860	76,152,627	652,061	119,940	83	706	101,818,786	
Weight of receipts in 1860,.....	lbs. 76,152,627					Weight in 1859,.....	lbs. 101,818,786				
“ “ in 1859,.....	101,818,786					“ “ in 1858,.....	90,912,949				
Decrease,.....	lbs. 25,661,159					Increase,.....	lbs. 10,900,937				
						Bags, &c.	Total lbs.				
Total packages received at New-York in 1860,.....						581,845	76,152,627				
Add stock January 1, 1860,.....						76,871	7,688,050				
Total supply,.....						618,516	83,840,677				
Deduct export in 1860,.....						64,446	8,500,850				
						554,070	75,340,827				
Deduct stock January 1, 1861,.....						67,658	8,455,030				
Taken from this port for consumption in 1860,.....						486,417	66,885,297				
“ “ “ in 1859,.....						640,313	83,700,472				
Decrease in 1860,.....						153,896	16,815,175				

	<i>Bags, &c.</i>		<i>Bags, &c.</i>
Total packages received in 1859, ..	772,789	Total packages received in 1858, ..	693,252
Add stock January 1, 1859,	67,592	Add stock January 1, 1858,	127,297
Total supply,	840,381	Total supply,	820,649
Deduct export in 1859, .. 123,397		Deduct export in 1858, .. 47,323	
And stock Jan. 1, 1860, .. 76,671		And stock Jan. 1, 1859, .. 67,592	
	200,068		114,915
Taken from this port for consumption in 1859,	640,313	Taken from this port for consumption in 1858,	705,734
Weighing,	lbs. 83,700,472	Weighing,	lbs. 98,156,663
Consumption in 1858,	98,156,662	Consumption in 1857,	60,892,824
Decrease in 1859,	lbs. 14,456,190	Increase in 1858,	lbs. 37,263,838

GENERAL STATEMENT FOR YEARS 1858-9-'60.

RECEIVED FROM FOREIGN PORTS.	Total Packages.			Stock, Jan. 1.		Exported.	
	1860.	1859.	1858.	1861.	1860.	1860.	1859.
At New-York,	510,302	681,223	683,123	67,658	76,671	64,444	122,397
At Boston, from—							
Java and ports in the							
East Indies,	29,478						
St. Domingo,	48,825						
Brazil,	8,000						
Other foreign ports,	596						
	86,894	151,823	198,887	2,979	82,825	8,725	12,888
At PHILADELPHIA:							
Brazil,	60,029						
Laguayra and P. C.,	36,021						
St. Domingo,	4,873						
Maracibo,	1,507						
Other foreign ports,	285						
	102,815	196,405	169,907	1,300	7,500	107	212
At BALTIMORE:							
Brazil,	181,392						
Laguayra and P. C.,	887						
Porto Rico,	244						
Other foreign ports,	1,618						
	184,041	243,008	211,402	25,500	19,000	281	467
At NEW-ORLEANS:							
Brazil,	230,109						
Cuba, &c.,	4,022						
	234,181	276,977	246,858	57,852	69,500	126	222
At OTHER PORTS,	91,805	97,051	76,168	16,400	9,200	815	371
Total,	1,259,818	1,746,587	1,631,229	170,484	215,696	73,958	128,289

Weight of receipts in,	1860.	1859.	1858.
	185,779,689 lbs.	248,527,306 lbs.	227,656,186 lbs.
Exported,	9,697,095	17,975,220	8,510,763
Retained in the country,	176,082,594 lbs.	230,552,086 lbs.	219,145,423 lbs.

	<i>Bags, &c.</i>	<i>Total lbs.</i>
Receipts in United States in 1860,	1,259,818	185,779,689
Add stock January 1, 1860,	215,096	26,155,800
Total supply,	1,474,914	211,935,489
Deduct export in 1860,	73,958	9,697,095
	1,400,961	202,238,394
Deduct stock January 1, 1861,	170,484	24,707,771
Taken for consumption in 1860,	1,230,477	177,530,623
Consumption in 1859,	1,586,503	223,882,850
Decrease in 1860,	356,026	46,352,227

<i>Packages.</i>		<i>Packages.</i>	
Receipts in United States in 1859, 1,746,587		Receipts in United States in 1858, 1,631,229	
Add stock January 1, 1859,..... 198,901		Add stock January 1, 1858,..... 336,341	
Total supply,..... 1,940,488		Total supply,..... 1,967,570	
Deduct exports in 1859, 138,989		Deduct exports in 1858, 66,637	
And stock Jan. 1, 1860, 215,696		And stock, Jan. 1, 1859, 198,901	
	858,985		260,538
Taken for consumption in 1859, 1,586,503		Taken for consumption in 1858, 1,707,032	
Weighing,.....lbs. 223,882,850		Weighing,.....lbs. 251,255,099	
Consumption of 1859,..... 251,255,099		Consumption of 1857,..... 172,565,924	
Decrease in 1859,.....lbs. 27,872,249		Increase in 1858,.....lbs. 78,689,165	

CONSUMPTION OF THE PORTS.

	1860.	1859.	1858.
Taken from New-York,..... lbs.	63,523,547 ..	74,782,632 ..	92,690,997
“ “ New-Orleans,.....	47,380,326 ..	55,238,360 ..	64,528,420
“ “ Baltimore,.....	28,257,480 ..	35,967,870 ..	41,890,800
“ “ Philadelphia,.....	15,481,985 ..	30,464,718 ..	27,694,252
“ “ Boston,.....	9,828,549 ..	12,052,220 ..	12,717,528
“ “ Other ports,.....	13,108,736 ..	15,427,050 ..	12,232,102
Total,..... lbs.	177,530,623 ..	223,882,850 ..	251,255,099
Total, 1859,.....	223,882,850		
Decrease,..... lbs.	46,352,227		

In the above statement of consumption we have included only the direct receipts at the ports, the *coastwise receipts* being embraced in the calculation at the port of original entry.

The preceding tables show that the total receipts of coffee in the United States (with the exception of the States on the Pacific) for the year ending December 31, 1860, were 1,259,818 packages, weighing 185,779,689 lbs., against receipts in 1859 of 1,746,587 packages, weighing 248,527,306 lbs., while the total consumption in 1860 was 1,230,477 packages, weighing 177,530,623 lbs., against a consumption in 1859 of 1,586,503 packages, weighing 223,882,850 lbs., being a decrease in the consumption of 1860, as compared with 1859, of 356,026 packages, or 46,352,227 lbs., a decline of over 20 per cent.

The decrease has been distributed among the ports as follows: New-York shows a falling off of 15 per cent.; Boston, 18.45 per cent.; Philadelphia, 49.34 per cent.; Baltimore, 21.44 per cent.; New-Orleans, 14.23 per cent.; and other ports, 15 per cent. In this calculation the *coastwise receipts* are not included, being already counted at the original port of entry.

The leading features evolved from an examination of these statistics are the comparatively small receipts throughout the year, meagre stocks at all the ports, (until toward the close, when the political troubles, and consequent monetary embarrassments, paralyzed trade, resulting in a rapid accumulation of the supply,) and high prices for the larger portion of the year.

The cultivation of the coffee plant is necessarily confined to a narrow tropical belt, beyond which its culture cannot be profitably pursued. Its production in the climates suitable for its growth seems to have been already stimulated to nearly if not its utmost extent. In Java and the

East Indies generally, the quantity gathered increases very slowly, if at all; indeed, in some parts of the East, we understand that the cultivation of the plant has, in many instances, been abandoned for that of the sugar cane, the latter being considered much the surest and most profitable crop. The crop of Brazil fluctuates largely, but for the past five years there has been rather a diminution than an increase. St. Domingo seems to be at a stand, and the only countries which increase their exports of this article, to any considerable extent, are Venezuela and the Island of Ceylon.

The consumption of the United States the past year, as we have seen, has been—say 79,250 tons—and that of Great Britain and the Continent is estimated at 195,000 @ 200,000 tons, making a total consumption in 1860 in Europe and the American States of about 275,000 tons. The consumption of this country has been increasing for ten years at the average annual rate of about 4 per cent., and that of Europe at over 3 per cent.

These figures are not barren of thought to the statistical student, evidencing, as they do, that the time must arrive, and that it cannot be far distant, when the consumption of the world must overtake its production. The question to be solved must be, to what altitude must prices attain in order to check the consumption and equalize the supply and demand? There are those whose opinion are entitled to weight, who advance the view that that point has been already touched, pointing to the fact that the importation at the principal ports of Europe, taken as a whole, the past year, have been insufficient for their consumptive wants, the year closing with a considerably reduced stock, and that after deducting the exports from the United States, a similar state of things is witnessed here; and to this cause may be attributed the continually advancing prices of the past few years, the effect of which is seen, as far as this country is concerned, in the serious decline in the deliveries for consumption, attended with a vigorous search for and increased sale of cheaper substitutes.

The annexed statement shows the receipts and consumption for the past eleven years:

	<i>Receipts.</i>	<i>Consumption.</i>		<i>Receipts.</i>	<i>Consumption.</i>
1860,..... lbs.	185,779,689	177,580,623	1854,..... lbs.	182,473,853	179,481,033
1859,.....	248,527,306	223,882,850	1853,.....	198,112,800	175,687,790
1858,.....	227,656,186	251,255,099	1852,.....	205,542,855	204,991,595
1857,.....	217,871,839	172,565,934	1851,.....	216,048,870	181,225,700
1856,.....	230,913,150	218,225,490	1850,.....	152,580,810	184,539,730
1855,.....	238,214,533	218,373,287			

Included in this statement is the quantity withdrawn from our markets, and forwarded inland to Canada and the British provinces; we are unable to ascertain the exact amount, but it does not vary greatly from 2,500,000 pounds.

ANNUAL REVIEW OF THE NEW-YORK MARKET.

The preceding tables set forth the extent of the commerce of this port, in this tropical production. A glance at the figures will show that the chief points of interest are, a decreased importation and a largely diminished consumption. The principal countries that have failed to

furnish the usual supply are Brazil and Java, besides some others of lesser note, beyond the Cape of Good Hope. The receipts at this port from all points, foreign and coastwise, for the year ending Dec. 31, 1860, were 541,845 pkgs., or 76,152,627 lbs.; against receipts in 1859 of 772,789 pkgs., or 101,813,786 lbs.; while the quantity taken for consumption in 1860 amounts to 66,885,297 lbs.; against a consumption in 1859 of 83,700,472 lbs., and in 1858 of 98,156,662 lbs.—showing a decline in the consumption of 1860, as compared with 1859, of over twenty per cent.

The year that we now review has been most note-worthy for a steady and large advance in the value of all descriptions, prices having reached a higher point for the leading kinds than has ever been recorded. The average price of Brazil for the year is nearly 18 per cent. higher than the average of 1859; St. Domingo, 19½ per cent. higher; Maracaibo and Laguayra, nearly 16½ higher; and Java, over 9½ per cent. higher. This unusual range of prices is, doubtless, mostly attributable to the short crop and consequent light supply of Brazil, which country furnishes us with much the larger portion of our consumption.

The year opened with the moderate stock of 76,661 pkgs., less than one-third of which was Rio, which imparted confidence to holders, and the market wore throughout the month of January a firm appearance. During the early part of it there prevailed quite an active demand for St. Domingo for export, and prices advanced over the closing rates of December, three-eighths of a cent per pound. The frequent public sales of Rio satisfied the wants of dealers and the trade, and prices of this description were well supported, the better grades of which rather turned in sellers' favor, being freely withdrawn at the auctions, the bids not being acceptable to owners; the month closing with a steady market and a fair demand. Sales and re-sales, public and private, for the month were 60,000 pkgs.

February commenced with a good feeling. A public sale of Santos, which occurred about the first, went off with good spirit at satisfactory rates, and, as the month advanced, a hardening tendency was visible. The stock of Rio continually decreased, and a considerable portion of it was withdrawn; this induced a speculative inquiry, under which, prices rose first a quarter of a cent, then another quarter, and toward the close, the stock at all the ports having run down to less than 75,000 bags, with none expected for several weeks, the market became excited and buoyant, with a further advance of a quarter of a cent, making about three-quarters of a cent rise during the month. West India and Java also sympathized to some extent with Brazil; Java became in speculative request, and West India was dealt in freely at an advance of a quarter of a cent, the month closing very buoyantly, operators looking forward to a still higher range of prices. Sales 105,000 pkgs.

The firmness observable at the close of February was not lost in the early part of March, but the high pretensions of holders restricted business, and the market became very quiet. The stock of Brazil had now been worked down to 4,000 bags, and there set in, not only for this, but for all kinds, an active demand, partly speculative; the transactions, however, being limited, owing to the small supply, prices steadily appreciated, and on Brazil, an advance of three-quarters of a cent for the month was obtained. Of St. Domingo the market was nearly cleared; a cargo

arriving about this time, was announced for auction—an unprecedented event—but before the day arrived was purchased by private bargain. Prices again reached a height that purchasers considered it unsafe to operate at, and, as compared with the previous excitement, the market became dull. Sales 56,000 pkgs.

The unusual prices that now ruled for the article induced more caution on the part of buyers, and the activity and buoyancy which we noticed through the greater part of March did not obtain in April; on the contrary, a languor and listlessness pervaded the market, and the dealings were for the most part in small lots, to supply the immediate wants of buyers. The stock, however, of Brazil during the first three weeks was very trifling, and not offered by importers, the sales being almost entirely from second hands; toward the close of the month, the supply of this description being increased, sellers became less indifferent, and the turn of the market seemed in buyers' favor. West India descriptions, on the other hand, retained their firmness, with a good business in St. Domingo and fair in other kinds. Sales 43,500 pkgs.

During the early part of May, importers of Rio became more desirous of selling, and several parcels were offered at public sale, but, though the attendance was good, there was no spirit, and prices declined a quarter of a cent from the recent extreme rates; this concession, however, failed to impart any activity, and though the stock was still very moderate, receipts light, and but little on the way, prices of this kind steadily receded, a further concession of $\frac{1}{4}$ @ $\frac{1}{2}$ cent was made, and yet without leading to any but a very moderate business; this apathetic state continued until toward the close, when an improved demand set in, and prices were again rather in sellers' favor. For St. Domingo there continued throughout the month a steady fair demand for export, and Java for home use, at supported prices. Sales for the month, 48,500 pkgs.

The improved feeling noticed during the latter part of May was followed early in June by an active and buoyant market. The accounts from Rio were of a favorable nature for holders, and they were enabled to realize an advance of a quarter of a cent; this did not check business—a further advance of one-eighth of a cent was obtained, quickly followed by an additional rise of $\frac{1}{4}$ @ $\frac{3}{8}$ cent. Upon this, the demand fell off, but without making any impression upon holders, whose position was strengthened by light receipts and moderate shipments hither; the month closing very quiet for Rio, but steady for West India kinds. Sales 58,500 pkgs.

July opened with a moderate demand for Rio, and steady market, but as the month advanced, the business became more animated and general; the sales were large at steadily advancing prices; the stock, not only here, but at all the ports, became reduced to a very low figure, the supply at all the receiving points being but about 8,500 bags. A despatch was received to the effect that the New-Orleans market had been swept for Western consumption, which caused considerable excitement, and an additional advance of one-quarter of a cent on all kinds was paid, the business being now entirely from second hands, (the only cargo in the market not being offered,) at prices one cent above those current the previous month, and higher than ever before known. This was the turning point. The demand began to fall off, and at the close there was but little business, though holders still maintained a firm attitude. West India and other kinds sympathized with Brazil in the advance, though less marked, and

consequently they did not feel the reaction quite so soon. The sales for the month were 59,000 pkgs.

The pause which we noticed at the close of July continued during the first half of August. The extreme and unusual prices that were now current for Rio, induced great cautiousness on the part of buyers, the purchases were only in a small way, and more attention was given to West India and Java, which descriptions appreciated one-quarter of a cent. This heavy feeling for Brazil was soon deepened by the receipt of several invoices here and at Philadelphia; buyers held aloof, and prices became entirely nominal, though some small sales were made at a decline of half a cent from the highest point, but this failed to stimulate the demand, and a further concession of $\frac{1}{8}$ @ $\frac{1}{4}$ cent was made, which induced more business, and rather more tone was now visible. West India and other kinds had also lost their buoyancy, and St. Domingo had receded one cent from the highest point. Sales of all kinds, 31,500 pkgs.

There was but little animation during the early part of September, but in prices there occurred no further change. The public sales that were now announced occupied attention, and the business at private was small. These sales having went off with unexpected spirit, and favorable accounts having been received from Rio, a better feeling was manifested, and the market assumed a firmer tone. Toward the latter part of the month, the stock again became much reduced, and an advance on Brazil of one-quarter of a cent was established. At this there continued a good steady business, with a firm and buoyant tone for all kinds. Sales 75,000 pkgs.

October opened with a firm feeling, and, at a public sale, which took place about the 1st, a further advance of one quarter of a cent was obtained; the business, however, was generally much restricted for want of stock, and the sales were again mostly from second hands, 4,500 bags having been run off at auction by parties who had purchased from importers. From the second week until the close of the month there was a very active and strong market; the supply became reduced to a stock of 2,081 pkgs. of all kinds, none of Brazil, buyers of which were compelled to make their purchases at the neighboring ports. About this time the arrival of five cargoes of Rio, together with several parcels of St. Domingo, Java, &c., caused a pause, holders accepted a reduction of one-quarter of a cent, which again brought in buyers, and the market assumed a very animated aspect. Further arrivals of Rio and Java compelled a further decline of one-quarter of a cent, at which buyers absorbed the bulk of the stock. Sales for the month, 99,500 pkgs.

Brazil, West India, &c., continued to come forward quite freely in the early part of November, but holders evinced a disposition to make no further concession; the business now became confined mostly to St. Domingo, for export, and the market was cleared of this description at prices current the month previous. Holders of Brazil, now impelled by the increasing stock and small demand, yielded a quarter of a cent, but without effect; another $\frac{1}{8}$ @ $\frac{1}{4}$ cent decline was submitted to, still without leading to any but a small business. About this time the aspect of political affairs became unsettled and gloomy; a crisis occurred in financial matters, and interior exchanges were much disordered by the suspension of specie payments at many points South and Southwest; all these influences were adverse to the coffee market, and prices completely broke down, being at the close $1\frac{1}{2}$ @ $1\frac{3}{4}$ cents below the opening rates of

the month, and even at this great decline there was but little business, excepting in St. Domingo for shipment, the month closing with a very uneasy and unsettled feeling. Sales 40,000 pkgs.

The dullness and depression which existed during the closing weeks of November suffered no diminution during the first half of December. The market for Rio seemed to have no stability or firmness, and prices again gave way one-half a cent, the stock of this description having accumulated to nearly 100,000 bags; other descriptions were also weak, and generally half a cent lower, the business being even at this decline very small. About the middle of the month, however, a rather more cheerful feeling began to appear; the advices from Europe were of a more favorable character; gold began to flow in from England, and in business circles the feeling gained ascendancy that, as far as financial matters were concerned, the worst had been experienced. With this returning confidence came a steadier and more hopeful tone, and though the business was not large, no further decline in prices took place, all parties looking forward to an improved state of affairs upon the inauguration of the new year. Sales 30,000 pkgs. Stock of all kinds 67,653 pkgs., against a stock of 76,671 pkgs. same time at the close of the previous year.

We annex a tabular statement, showing the range of prices in this market for the leading descriptions the past three years:

THE RANGE OF PRICES AND YEARLY AVERAGE AT NEW-YORK
THE PAST THREE YEARS.

BRAZIL.—FAIR TO PRIME QUALITY.

1860.	1st.	10th.	20th.	Average for the Month.		
				1860.	1859.	1858.
January,.....	11½ @ 12½	11½ @ 12½	11½ @ 12½	\$ 12 00	\$ 11 37½	\$ 10 12
February,.....	11½ @ 12½	11½ @ 12½	12 @ 13	12 16	11 37½	10 58
March,.....	12½ @ 13½	12½ @ 13½	13½ @ 14	13 12½	11 50	10 79
April,.....	13½ @ 14	13½ @ 14½	13 @ 14½	13 79	11 62½	11 00
May,.....	13½ @ 14½	13 @ 14½	13 @ 14	13 66	11 62½	10 92
June,.....	13 @ 14	13½ @ 14½	13½ @ 14½	13 79	11 46	10 88
July,.....	13½ @ 14½	13½ @ 14½	14½ @ 15	14 21	11 46	11 04
August,.....	15 @ 15½	15 @ 15½	14½ @ 15½	15 16	11 12½	10 96
September,....	13½ @ 15½	13½ @ 15½	14½ @ 15½	14 62½	11 71	11 13
October,.....	14 @ 15½	14 @ 15½	14 @ 15½	14 62½	11 87½	11 38
November,....	14 @ 15½	13½ @ 15	13½ @ 15	14 37½	12 —	11 38
December,....	13½ @ 14½	11½ @ 13	11½ @ 13	12 79	12 16	11 38
Average for the year,.....				\$ 13 69½	\$ 11 61	\$ 10 96

ST. DOMINGO.

1880.	1st.	10th.	20th.	Average for the Month.		
				1880.	1859.	1858.
January,.....	— @ 11½	11½ @ 11½	11½ @ 11½	\$ 11 58½	\$ 9 39	\$ 8 10
February,.....	— @ 11½	— @ 11½	— @ 11½	11 62½	9 85	8 78
March,.....	— @ 11½	— @ 11½	12 @ 12½	11 91½	9 66	9 96
April,.....	12 @ 12½	12½ @ 12½	12½ @ 12½	12 37½	10 14	9 50
May,.....	12½ @ 12½	12½ @ 12½	— @ 12½	12 39½	10 23	9 17
June,.....	— @ 12½	— @ 12½	— @ 12½	12 54	9 64	9 17
July,.....	12½ @ 12½	12½ @ 12½	13 @ 13½	12 85½	10 41	9 37
August,.....	13½ @ 14	13½ @ 14	13½ @ 13½	13 79	10 75	9 35
September,....	12½ @ 12½	12½ @ 13	13 @ 13½	12 87½	11 29	9 46
October,.....	13 @ 13½	13 @ 13½	13 @ 13½	13 12½	11 06	9 85
November,....	12½ @ 13	12½ @ 12½	11½ @ 12	12 37½	11 —	9 54
December,....	11½ @ 12	10½ @ 11½	— @ 11	11 33½	11 26	9 17
Average for the year,.....				\$ 12 39½	\$ 10 39	\$ 9 28

MARACAIBO AND LAGUAYRA.

1880.	1st.	10th.	20th.	Average for the Month.		
				1880.	59.	1858.
January,.....	12 @ 13½	12 @ 13½	12½ @ 13½	\$ 12 70	\$ 11 96	\$ 11 33
February,.....	12 @ 13½	12 @ 13½	11½ @ 13½	12 62½	12 08	11 50
March,.....	12½ @ 13½	12½ @ 13½	12½ @ 14½	13 04	12 08	12 50
April,.....	13 @ 14½	13 @ 14½	13 @ 14½	13 66½	11 62½	13 00
May,.....	13 @ 14½	13 @ 14½	13 @ 14	13 62½	11 75	12 42
June,.....	13 @ 14	13 @ 14½	13 @ 14½	13 58½	11 50	12 00
July,.....	13 @ 14	13 @ 14	14 @ 14½	13 79	11 12½	11 87
August,.....	14½ @ 15½	15 @ 15½	14½ @ 15½	15 12½	11 33	12 13
September,....	13½ @ 15½	13½ @ 15	14½ @ 15	14 50	12 04	12 08
October,.....	14½ @ 15	14 @ 15	14½ @ 15½	14 66½	12 62½	12 04
November,....	14½ @ 15½	14 @ 15½	13½ @ 14½	14 58½	12 12½	11 84
December,....	13½ @ 14½	13½ @ 14½	13½ @ 14½	14 08½	12 41	11 75
Average for the year,.....				\$ 13 52½	\$ 11 89	\$ 12 04

JAVA (WHITE.)

1880.	1st.	10th.	20th.	Average for the Month.		
				1880.	1859.	1858.
January,.....	14½ @ 15	15 @ 15½	14½ @ 15½	\$ 15 00	\$ 14 29	\$ 16 00
February,.....	15 @ 15½	14½ @ 15½	15 @ 16	15 25	14 71	16 08
March,.....	15½ @ 16	15½ @ 16	15½ @ 16½	15 75	14 33	18 25
April,.....	15½ @ 16½	15½ @ 16	15½ @ 16	15 83½	14 58	19 17
May,.....	15½ @ 16	15½ @ 15½	15½ @ 16	15 70	14 75	17 71
June,.....	15½ @ 16	15½ @ 16	15½ @ 16	15 75	14 50	16 75
July,.....	15½ @ 16	15½ @ 16	15½ @ 16½	15 87½	14 50	15 88
August,.....	16½ @ 18	16½ @ 18½	16½ @ 17½	17 20	14 50	15 50
September,....	16 @ 17½	16½ @ 17½	16½ @ 18	16 95	15 54	14 91
October,.....	16½ @ 18	16½ @ 18	16½ @ 17½	17 12½	15 41	15 00
November,....	16½ @ 17½	16½ @ 17½	16½ @ 17½	16 91½	15 12½	14 17
December,....	16½ @ 17½	16 @ 16½	16 @ 16½	16 45	14 71	14 17
Average for the year,.....				\$ 16 15½	\$ 14 79	\$ 16 13

ANNUAL REVIEW OF NAVAL STORES FOR 1860.

From the Shipping and Commercial List, and New-York Price Current.

RECEIPTS AT, AND EXPORTS FROM, NEW-YORK.

MONTHS.	RECEIPTS IN 1860.				EXPORTS IN 1860.			
	Turpen- tine.	Spirits Turp'e.	Rosin.	Tar.	Turpen- tine.	Spirits Turp'e.	Rosin.	Tar.
January.....bbls.	7,619	11,088	58,996	4,269	7,066	4,040	22,780	621
February.....	7,549	7,807	27,772	1,612	7,549	7,207	27,772	1,612
March.....	7,629	16,818	57,818	4,757	4,450	4,634	51,858	2,875
April.....	5,540	5,248	49,389	16,816	6,690	7,105	67,068	5,222
May.....	5,625	12,010	88,309	4,785	5,015	2,494	55,025	7,204
June.....	3,774	16,885	62,616	5,127	7,485	5,841	63,702	4,844
July.....	5,768	19,971	66,651	806	719	7,608	54,808	1,835
August.....	2,788	17,647	57,441	1,164	1,828	12,851	29,848	989
September.....	2,430	16,751	66,427	2,763	3,963	5,657	26,422	170
October.....	2,441	17,309	47,319	2,724	2,258	5,730	44,814	402
November.....	2,256	12,285	22,202	2,279	53	1,506	26,991	222
December.....	5,276	7,678	27,247	6,844	7,563	7,788	20,306	2,262
Total, 1860....bbls.	60,798	158,912	621,982	54,045	54,645	71,741	500,853	28,748
1859.....	96,654	161,110	653,428	54,092	83,699	66,551	387,960	19,004
1858.....	104,851	142,824	563,291	83,125	98,066	57,657	445,811	18,518
1857.....	76,443	196,006	551,918	52,634	78,850	50,021	447,480	27,724
1856.....	85,418	118,325	479,248	61,048	81,460	87,583	383,123	21,724
1855.....	99,670	132,142	534,396	72,664	97,252	47,546	460,160	55,594
1854.....	124,162	195,515	498,868	67,792	135,614	46,200	449,204	58,212
1853.....	143,523	117,837	397,174	67,575	125,175	26,318	302,763	14,520
1852.....	189,711	81,695	293,161	37,067	128,401	7,481	227,600	15,220
1851.....	170,040	76,672	287,145	39,147	147,850	6,486	169,220	23,004
1850.....	148,561	74,000	275,478	56,613	140,611	7,963	174,062	26,268

EXPORTS OF THE YEAR.

PLACES.	Turpentine.	Spirits Turpentine.	Rosin.	Tar.
Great Britain took.....bbls.	52,215	27,774	176,525	23,210
France.....	none	120	6,882	none
North of Europe.....	2,204	28,364	265,712	16
Other Europe, &c.....	226	5,488	51,426	5,522
Total, 1860.....bbls.	54,645	71,741	500,853	28,748

REVIEW OF THE MARKET FOR 1860.

General Remarks.—It will be seen, by the accompanying tables, that the receipts of Crude Turpentine at this port are some 36,000 bbls. less, Spirits Turpentine 2,200 less, and Rosins 21,500 bbls. less than last year, while the quantity of Tar received was almost exactly the same. The export of Turpentine the past year has fallen off 34,000 bbls., and Rosin 67,500 bbls., while Spirits Turpentine has increased over 5,000, and Tar 9,000 bbls., as compared with last year. The large falling off in the export of Rosins may be mainly attributed, perhaps, to the high rate of freight which ship-owners have been able to command during the greater

part of the year, while the deficiency in the exports of Crude have been nearly made up by the increase in Spirits Turpentine, and by largely increased direct shipments, (of all descriptions,) mainly from Wilmington, N. C. (See table.) We notice a large increase in the quantity of New-York made barrels, and continued preference for Spirits in these, over most of the Southern-made packages. The average price of Turpentine for the year is considerably below the average of several previous years, and that of Spirits materially below last year. Common Rosin, with slight fluctuations, has tended downward since March, (when the first grain shipments were made,) while Tar has maintained about the same rates as last year, which were considerably above the average of the years 1858 and 1857.

In the opinion of many intelligent persons, the late depression in Spirits Turpentine, and the decline in prices from March last to the close of the year, are to be attributed more to some other cause than the usual one of supply and demand. It cannot be denied that, for illuminating purposes, the consumption of Kerosene and Petroleum Oils, since their discovery, has only been limited by the want of an adequate supply, and the fears of the trade and consumers that the pine tree of the South might yet be exterminated by the tapping process, and the supply of Camphene and Burning Fluid cut off, have been greatly alleviated, if not entirely removed, by the introduction of this new article; though, for many important uses, there is at present no substitute for Spirits Turpentine known. The foreign demand, as will be seen by the accompanying tables, is increasing every year, the decrease in the quantity of Crude exported from this port being about compensated by the increased export of Spirits.

Turpentine.—The year 1860 commenced with a quiet market for Crude Turpentine, with a quotation of \$3 43½ per 280 lbs., and a stock of 9,000 bbls. *London, Dec. 16.*—Sales, 2,500 bbls., at 10s. The third week of the month our market improved slightly, and free sales were made for export at \$3 56½, and subsequently at \$3 50, closing at that rate. Considerable shipments were also made from first hands during the month, the London quotations meantime declining to 9s. 6d. @ 9s. 9d. The rate of freight to London, during the month, ranged from 2s. 6d. to 3s., closing at 3s. February opened with a stock in first hands of only 3,500 bbls., and with a fair demand; prices had improved to \$3 62½ at the middle of the month, remaining nominally at this rate to the close; but the upward tendency of freight checked the demand, and the stock accumulated to 9,500 bbls.—London quotations ranging from 9s. 3d. to 9s. 9d., and Liverpool 8s. 4½d. @ 8s. 9d.—freights hence ranging from 3s. to 3s. 3d., closing at 3s. 3d. In March the supply was good, and, though there was little or no variation in London quotations, which, more than all other causes, influence this market, holders, to effect sales, were obliged to accept \$3 55 the third week, after which there was little done for nearly a month, March closing inactive, with a stock, officially taken, of 9,500 bbls., and a London quotation of 9s. 6d.—freights hence to London ranged from 3s. to 3s. 3d., closing at 3s. The second week of April sales were made at \$3 40, a further decline, but the business throughout was very light, and prices nearly nominal, the supply being good, and the stock at the close 9,844 bbls.—London quotations ranging from 9s. to 9s. 3d.—freight hence, 2s. 6d. @ 3s., closing at 2s. 6d. @ 3s. The

quotation in May varied from \$3 20 to \$3 40, commencing at the higher figure, selling down to \$3 20 the second week, when a considerable business was done, prices ranging again to \$3 35 @ \$3 37½ at the close, with sales, the stock (11,000 bbls. the second week) being now reduced, by sales and shipments, to about 3,000 bbls.—London quotation during the month, 9s. 3d.—freight hence, 2s. 6d. @ 2s. 7½d., closing at same. In June, sales continued to be made at \$3 37½, till the close of the third week, when 500 bbls. new crop Washington was sold at \$3 37½ @ \$3 50, a slight improvement, though this rate was not maintained, the inquiry being very feeble, and the next sales made at about \$3 30 @ \$3 35, which was the closing quotation—stock, 3,143 bbls.—London quotations at hand during the month, 9s. @ 8s. 9d., closing at 8s. 9d., under date of June 15—freight hence, 2s. 6d. @ 3s., closing at 3s. In July, with advancing freights, there was almost no demand, and but a few hundred barrels were sold, at \$3 35 @ \$3 25, closing quite nominal at \$3 per 280 lbs., with a stock of 7,765 bbls.—the London quotation steady at 8s. 9d.—freight hence ranging about 3s. In August, freights continued to tend upward, and, there being no advance in London, prices further declined, with sales at \$2 75, closing nominal at that rate. Some new crop received at London in June was held at 9s. 3d., but, we believe, sold at the old quotation of 8s. 9d.—stock at the close of the month, 5,000 bbls.—freight hence, 4s. per 280 lbs.—London quotation, 8s. 9d. September opened more firmly, and higher rates were demanded and paid, the sales of the month being to a moderate extent at \$2 85 @ \$2 90, closing at the latter price, with a stock of 7,000 bbls.—freights hence steady at 4s.—London quotations, 8s. 6d. @ 9s., the higher figure at the close. In October, with improving prices in London, our market assumed more firmness, and sales were made as high as \$3; but after the third week there were no transactions, and the market closed quiet and nominal—stock, 8,741 bbls.—freight hence, 3s. 6d. @ 4s., closing at 3s. 9d. The London price, mean time, advanced to 10s. In November, in consequence of the higher range of freights and the stringency in the money market, small sales were made at \$2 90 @ 2 95, and the market closed exceedingly dull and altogether nominal—stock on hand, 30th, 9,687 bbls.—freight hence, 3s. 9d. @ 4s. 6d., closing at 4s. 6d.—London quotations ranged from 10s. 3d. to 11s., the latter November 16. In December there were no wholesale transactions, and the market closed nominal at \$2 50 @ \$2 75, the total sales being but a few hundred barrels North County within this range, the lower sale at the close; the shipments and engagements of the month, however, were considerable, and the stock was reduced.—London quotations, 10s. 6d. @ 11s., the lower rate at the close, under date of December 14. Freights hence to London, during the month, 4s. @ 4s. 6d., closing at 4s. @ 4s. 3d., with engagements of 11,000 bbls. in the month.

Spirits Turpentine.—The market for this valuable and indispensable Southern product opened at 44 @ 44½ cents for merchantable and straight, 44½ @ 45 for shipping order, and 45 for New-York barrels, and continued remarkably steady throughout January, scarcely varying half a cent, though that was in favor of sellers, and prices the last week were firm for prime packages, at half a cent advance on the opening rates, with more favorable foreign intelligence. The stock, which was 4,500 bbls. on the 1st of the month, was 6,000 bbls. at the close, the London quotation

ranging from 34s. to 34s. 6d., and the Liverpool, 33s. 9d. @ 34s. With favorable accounts from Liverpool, and small arrivals, with little in prime order offering, prices at the commencement of February began to improve, and the third week were 2½ @ 3½ cents higher for shipping and New-York packages, and 12 cents for rejections—(London notations at this time, 36s., and Liverpool, 36s. @ 36s. 6d.) Sales were also made for future delivery, part in all the next month, at 48 cents for shipping order, and 49 for New-York barrels. During the last week of the month the market was steady, and closed at about 46½ @ 47½ cents for merchantable and straight, 48 for shipping, and 49 for New-York—stock, 4,000 bbls. London, 36s. 6d. @ 37s., and Liverpool, 36s. March opened with a good demand at the closing prices of February, but the inquiry soon slackened, and prices softened until the middle of the month, when half a cent decline was established, and large receipts following, half a cent further decline was submitted to the third week; but now holders assumed a firmer attitude, withholding a considerable portion of their stock, and the market became firm at 47 @ 48 for straight, shipping and New-York, with sales of the latter to arrive; this improvement was of short duration, however, and the offerings on the wharf increasing, prices declined to the close, being quoted 46 @ 46½ cents for straight and shipping. Stock on hand, 8,500 bbls. The London quotations at hand during the month were 35s. 6d., and Liverpool, the same range, the lower rate at the close, date March 16. Throughout April prices were remarkably steady, scarcely varying half a cent from the opening rates, which were 45 @ 45½ cents for rejections and merchantable, 45½ @ 46½ for ordinary to prime straight and shipping, and 46½ @ 47½ for New-York, prime packages commanding, as always, full rates. The second week of the month we noticed a sale of 1,000 bbls., deliverable at a Southern port, for export thence on private terms, and the fourth week, a lot of 46 bbls. Virgin was sold to arrive from Charleston, at 47 cents, and 500 Southern, deliverable all in May, at 46, shipping order, the market closing firmly. The stock, which amounted to 10,000 bbls. at the close of the first week, was reduced by sales and shipments to 1,500 at the close. London quotations, 35s. 6d. @ 36s. 6d., and Liverpool, 35s. 6d., the former having slightly improved. May opened with a brisk demand and a greatly reduced stock, and much of that expected being already placed, the market became excited, and prices advanced the first week 2 cents per gallon, with sales on the spot, at irregular rates, according to circumstances, order, &c. From the 4th to the 8th of the month the stock was reduced to 500 bbls., and sales were made (including considerable to arrive within the range) at 47½ @ 51½ cents, including New-York, on the spot, on the 7th, at the higher figure; on the 8th some arrivals took place, and the pressure being partially relieved, there was less animation, and prices settled somewhat, with sales to arrive at 47 @ 47½, (including 500 New-York, at 47½,) and for immediate delivery, 49 @ 50, with some New-York to arrive at 49, barrels returnable at \$1 80 each. Subsequently the receipts were quite free, prices fell off, and, with little fluctuation, declined to the end of the month, closing at 45 @ 45½ for straight and shipping, 46 for New-York, on the spot, and 45 for prime Southern and New-York, to arrive. The stock at no time exceeded 2,500 bbls., and at the close was 1,981 bbls. London quotations at hand, during the month, 35s. 6d. @ 36s., and Liverpool, 34s. @ 35s. The month of June opened

with a declining tendency, and at the close prices were generally $2\frac{1}{2}$ cents lower than at the commencement, though the demand was fair throughout, and at the commencement of the fourth week a large business was done, though at a wider range than usual, most of the stock being in ordinary condition, and prime shipping and New-York scarce; at this time poor lots sold as low as $41\frac{1}{2}$ cents, while prime New-York brought 44 @ $44\frac{1}{2}$, in consequence of its scarcity. At the commencement we quoted sales at $44\frac{1}{2}$ @ 45 cents for straight and shipping, and $45\frac{1}{2}$ @ 46 for New-York, (part to arrive at $45\frac{1}{2}$), and at the close, 42 @ 43 for straight and shipping, and 43 @ $43\frac{1}{2}$ for New-York. Some sales were made to arrive, as usual; and the third week, when New-York, on the spot, was selling at $43\frac{1}{2}$, a contract was made for 1,000 bbls, deliverable next month, at $42\frac{1}{2}$ cents. Stock, on the 30th, 3,112 bbls. London quotations, 35s. @ 35s. 6d., and Liverpool, 33s. 9d. @ 35s., closing at the lower figures in both cases. In July the same features obtained, and the same relation of ordinary and prime packages was maintained, the hot weather being very trying to poor packages. From the first to the first half of the third week prices continued to decline, but having now reached a point where some orders could be executed, the downward tendency was arrested, but the month closed dull, especially for ordinary lots—the receipts at the South being large, though the stock on hand, 31st, was only 4,670 bbls., a much smaller figure than was generally supposed. At the commencement of the month, sales of ordinary straight lots were made as low as 40 cents, shipping at 42, and New-York at 43; and at the close, straight brought $37\frac{1}{2}$ @ 38, shipping 38 @ $38\frac{1}{2}$, and New-York 39 @ $39\frac{1}{2}$, while rejected and barely merchantable sold from 40 down to 36, closing at $36\frac{1}{2}$ @ 37; these latter, however, are not a fair criterion of the market, though they may serve to account for the low prices at which lots are often sold, when the owners expected to get our highest figures. Contracts for New-York barrels, maturing the second week of the month, were settled on a basis of $40\frac{1}{2}$ cents; London quotations, 34s. @ 35s., and Liverpool, 32s. @ 33s., closing at the lower figures. At the commencement of August, prime straight and shipping being comparatively scarce, these descriptions were held more firmly, and though the English markets further declined, prices here steadily advanced, till, at the close of the third week, with a very small supply, an improvement of $2\frac{1}{2}$ cents had been realized, straight and shipping selling at 40 @ 41 cents, and New-York straight and shipping, 41 @ 42. Immediately after this, advices from England and the continent continuing adverse, prices declined $\frac{1}{2}$ @ 1 cent, rallying slightly, and closing quietly at 39 @ $39\frac{1}{2}$ for rejected and merchantable, 40 @ 41 for straight and shipping, and 41 @ $41\frac{1}{2}$ for New-York. The first week of the month sales of New-York were made at 41 for September, and 43 for October delivery; and the third week, for all August, at 41; and at the close, 500 Southern shipping, for delivery, first week of September, at 40 cents. Stock, 6,096 bbls. London quotations, 30s. @ 32s. 6d., and Liverpool, 30s. 6d. @ 31s., closing at the lower rates. September opened with a moderate demand, chiefly for New-York, and at some reduction, say at 39 @ $39\frac{1}{2}$ cents for straight, 40 for shipping, and 41 @ $41\frac{1}{2}$ for New-York; and at the close of the first week prices were $\frac{1}{2}$ a cent lower on shipping and New-York—poor lots, as usual, bringing $\frac{1}{2}$ @ 1 cent less than prime straight. The second week prices were steady, and the third ad-

vanced half a cent; and notwithstanding the arrivals were large, a further advance of half a cent on prime packages was obtained before the close of the month, being now $\frac{1}{2}$ @ 1 cent higher than at the commencement, the whole range being 40 @ 42 cents; stock, 5,000 bbls. London quotations, 31s. @ 31s. 6d., and Liverpool, 31s. @ 32s., closing at the higher rates. In October, with a stock again reduced, prices appreciated the first and second weeks one cent per gallon, though the high freights to Europe checked what demand there might have been for export. At this time 41, $41\frac{1}{2}$ and $42\frac{1}{2}$ @ 43 cents were paid for straight, shipping and extra Southern and New-York; but by the close, with large receipts, this advance was lost, the market closing dull and unsettled, with a strong tendency to a further decline; merchantable and straight sold at 39 @ 40, and shipping and New-York, 41 @ $41\frac{1}{2}$ cents. Stock, at the close, 11,252 bbls. London quotations, 32s., and Liverpool, 31s. 6d. @ 31s. 9d. With a heavy stock pressing upon the market, the first week in November opened with a very depressed feeling, and $\frac{1}{2}$ @ 1 cent lower was accepted, poor lots selling at 37 @ 38 cents, straight and shipping, 39 @ 40, and New-York, 40 @ 41; but the English advices being of a decidedly favorable tenor, the downward tendency was arrested, and the market was steady the second week. The unsettled state of money matters, however, counteracted all favorable influences, and by the close of the month sales were made at 36 @ 37 cents for straight and shipping, and $36\frac{1}{2}$ @ 37 for New-York, with little demand and some decline in the English market. Stock on hand, 9,436 bbls. London quotations, 33s. @ 35s., closing at 33s. 9d. @ 34s., and Liverpool, 31s. 6d. @ 35s., closing at 34s. In December our market rapidly declined till after the middle of the month, when our quotations were 5 @ 6 cents lower than at the close of November, with declining English markets and ample stocks. From this time, however, there was more firmness on the part of receivers, with an improved demand for export, and at the close an advance of 3 cents from the lowest point had been established; straight lots, which had sold down to 31 cents at the middle of the month, now brought 34; Southern shipping, which had sold at 32, was firm at 35; and New-York, which was dull at 33, had advanced to 36, cash, with moderate sales. Among the transactions at the close of the third week were 500 bbls. New-York, deliverable in January, sellers' option, at 36, and 500 do., deliverable in February, buyers' option, at 38 cents, cash. The freight engagements of the month were large, including a bark for Rotterdam, with 3,000 bbls., at $5\frac{1}{2}$ cents; a vessel to Antwerp, at 5c.; a British brig from Charleston to Antwerp, with 500 bbls., at 6s., (and Rosin, at \$1 20), two to Bristol Channel and Bristol, at 9s.; a British bark to Liverpool, with 1,000 bbls., at 8s., (and Tar, at 3s. 9d. @ 4s.,) besides some 3,000 bbls. to London, at 8s. @ 9s., and 150 to Marseilles, at 4 cents per gallon. London quotations, 33s. @ 32s., closing at 32s. @ 32s. 6d., and Liverpool, 33s. @ 32s., closing at 32s.

Common Rosin.—The year commenced with a very small stock and a dull market, at \$1 60 per 310 lbs., delivered; but very soon advanced to \$1 60, to arrive, and $\$1\ 62\frac{1}{2}$ @ \$1 65, delivered, with good sales; (about this time 8,000 bbls. were bought in Wilmington at \$1 15, there.) The latter part of the third week of January, however, with some advance in freights, prices began to decline, and at the close, \$1 $52\frac{1}{2}$ afloat and in yard, and \$1 55 delivered, was accepted. Liverpool quotations,

4s. @ 4s. 4d., closing at 4s. 3d. February opened with the same depressed feeling, and still lower rates were the consequence, sales being made the first week at \$1 50 in yard, \$1 50 @ \$1 52½ delivered by vessel, and \$1 52½ @ \$1 55 delivered from yard. The second and third weeks a large business was done, and prices improved 10 @ 12½ cents, the month closing quietly at \$1 65 @ \$1 67½, delivered. Liverpool quotations, 4s. 3d. @ 4s. 6d., closing at latter rate. At the commencement of March, freight room continuing scarce, prices declined to \$1 57 afloat, for cargoes, and \$1 62 @ \$1 65 delivered, for lots as wanted. At the close of the second, and during the third week, there was again more demand, \$1 62½ being paid to arrive and in yard, and \$1 65 @ \$1 68½ delivered; but these rates were not maintained, and the market closed quietly at \$1 60 @ \$1 62½ in yard, afloat and to arrive, and \$1 65 delivered. Liverpool range, 4s. 4d. @ 4s. 6d., closing at the lower rate. April opened with a decline, sales being made at \$1 55 for cargoes afloat, \$1 57½ @ \$1 60 in yard, and \$1 65 for lots as wanted, delivered from yard; for parcels afloat and in yard, an improvement of 2½ @ 5 cents was soon realized, the Liverpool accounts being rather encouraging, and prices were rather steady at \$1 60 @ \$1 62½ afloat and delivered, till the close of the month. May opened with sales at \$1 57½ @ \$1 60, afloat and to arrive, and \$1 62½ delivered, but during the second week, with free arrivals, cargoes were placed at \$1 52½ @ \$1 54 afloat, and \$1 60 delivered from yard, after which there was little variation, the month closing at \$1 53½ @ \$1 55 afloat, and \$1 57½ @ \$1 60 delivered. Liverpool quotations, 4s. 1d. @ 4s. 6d., closing at the higher figure, date May 18. In June, sales were made the first of the month at \$1 55 afloat, and \$1 57½ @ \$1 60 delivered, and at the close at about the same figures, small lots from yard sometimes bringing 2½ cents more and cargoes sometimes being placed at as much less—the lowest sales made were at \$1 50 @ \$1 52½ in yard, in the commencement of the fourth week, and the whole range of the month, \$1 50 @ \$1 57½ in yard, afloat, delivered by vessel, &c., and \$1 56 @ \$1 62½ delivered from yard, closing as above. Liverpool, 4s. 5d. @ 4s. 6d. July, with hardening freights hence, at \$1 50 per 310 lbs. in yard, \$1 52½ @ \$1 55 afloat and to arrive, and \$1 55 @ \$1 57½ delivered; and as the month progressed, prices declined to the end, closing at \$1 42½ @ \$1 45 in yard and afloat, and \$1 47½ @ \$1 50 delivered, the bulk of the receipts going in yard. Liverpool quotation, 4s. 5d. In August prices again declined, commencing at \$1 42½ @ \$1 45 afloat and delivered, reaching \$1 35 @ \$1 37½ afloat and in yard, and \$1 42½ @ \$1 45 delivered, the second week, and closing at \$1 35 @ \$1 36 in yard, and \$1 40 delivered. Liverpool quotation, 4s. 2d. @ 4s. 5d., closing at the higher rate. In September, prices already lower than since the panic of 1857, still further declined, with sales the first week to arrive per steamer, at \$1 25, immediate delivery, and to arrive in the ordinary way \$1 35, in yard; subsequently sales were made to arrive at \$1 30 afloat, delivered by vessel, and \$1 35 delivered from yard. Near the middle of the month sales were made at \$1 32½ @ \$1 35 afloat, and \$1 37½ @ \$1 40 delivered from yard, and so continued till the commencement of the fourth week, when, with favorable foreign advices, and the report of some 25,000 bbls. having been bought up in Wilmington on New-York account at \$1 05 there, our market advanced to \$1 45 afloat, and \$1 45 @ \$1 47½ deli-

vered. Liverpool 4s. 5d. @ 4s. 9d., closing at the higher rate. On the first of October the demand was good, and free sales were made to fill contracts, at \$1 41 @ \$1 45 afloat, and \$1 50 @ \$1 52 delivered, but from this time to the end of the month the scarcity of freights pressed heavily upon Rosin, notwithstanding the accounts from Liverpool continued favorable; at the close sales were made at \$1 42½ afloat and \$1 45 delivered, with a downward tendency. Liverpool quotations at hand during the month, 5s. 3d. @ 5s. 6d., closing at the latter figure. November opened at \$1 42½ @ \$1 45 delivered, and so continued till the middle of the month, when prices gave way, and sales were made at \$1 35 in yard, and \$1 40 @ \$1 42½ delivered, the decline making progress till the fourth week, when \$1 30 delivered was accepted, and the market closed entirely nominal at this rate. Liverpool quotation, 5s. 3d. @ 5s. 6d., closing at 5s. 3d. @ 5s. 4d. The first sales made in December were at a further decline, viz., \$1 20 per 310 lbs. delivered, and a lot put upon the market the first week brought only \$1 10 in yard, and during the second, third and fourth weeks, sales were made in small lots at \$1 15 @ \$1 20 delivered, including some afloat and to arrive at \$1 15 @ \$1 17½, delivered by vessel; the rates reached above are believed to be lower than since the year 1851. The last week of the month, the stock being concentrated in few hands and held firmly, some improvement was realized, sales being made variously at \$1 16 in yard, \$1 17½ for future delivery, and \$1 20 @ \$1 25 delivered, closing at our highest figure.

Fine Rosins.—Our readers are well aware, that though much may be said and written, no intelligible history of the grades above common can be communicated in a review of the market, the remarks made in our last annual review, on this subject, being of perpetual application. The year opened with low, but rather improving prices, no Pale on hand worth over \$4, and an impression, generally, that rates had reached the lowest point—the stock on hand being chiefly composed of No. 1, worth \$2 @ \$2 50. Much of that left over from last year was in second hands awaiting shipment, or held for higher prices. The high rates of freight which have obtained most of the past year have operated disastrously on fine rosins, particularly on the low grades, the supply of which has far exceeded the demands of trade, especially at a time when freights rule high, as they have during the period under review. Strained opened at about \$1 60 per 310 lbs., improved to \$1 67½ early in March, since which, with occasional fluctuations, the tendency has been generally downward, and sales were made down to \$1 15 @ \$1 20, closing at \$1 25 per 310 lbs. No. 2 was quoted \$1 65 @ \$1 70 at the opening; sold variously up to \$2 in March, and afterwards gradually declined to \$1 30 @ \$1 50, closing with sales at \$1 35 @ \$1 50 per 310 lbs., the latter for a prime lot. No. 1, quoted at \$1 87½ @ \$2 50 at the commencement, improved the first month, the range being \$2 @ \$2 75 per 280 lbs., gradually improving to \$2 25 @ \$3 in March and April, after which, in sympathy with the lower grades, and with advancing freights, prices receded, with sales of low qualities in May at \$1 80 @ \$2 per 310 lbs., up to \$2 75 per 280 lbs. for prime, after which prices varied little, or rather goods were classed according to the prices obtained. In October, however, some sales were made as low as \$1 90 per 280 lbs., and, at the last of the month, some sold at \$1 75 @ \$2 25 per 310 lbs., and near the end of the year at \$2 @

\$2 25 per 280 lbs., the whole range being \$1 55 for low, up to \$2 50 for prime quality per 310 and 280 lbs. We must again repeat, that when prices decline, better goods are put in at the same rates, calling them the same quality, and it is for this reason, that without a comparison of samples, no idea can be given of the market the past year that would be any guide in the future. White Rosins, being a quality between No. 1 and Pale, have generally been quoted from \$2 50 to \$3 75 per 280 lbs., and Pale has ranged from \$3 50 to \$6. The first Virgin Pale that came to hand was received on the 8th of March, viz, 9 bbls. from Fernandina, Fla., and a further lot was received shortly after, both which sold at \$6, quality not extra—the first lot in 1859 was received from Alabama, about 1st April, and sold at \$7, subsequent parcels of a better quality bringing \$8 per 280 lbs., against \$8 25 in 1858. After this period, Virgin samples failed to attract attention as in previous years, and very few sales were made, though prime lots were held at \$6. The first and second weeks in May some changed hands at \$5 on the spot and to arrive, and some good Pale sold as low as \$4, to arrive. After this there was more inquiry, with sales at \$4 @ \$6, prime lots, (which have not at any time been in large supply,) commanding the higher figure, the receipts being generally inferior to previous years, and including but few really prime, these having been probably shipped direct from the South, to a greater extent than heretofore. From the last week in August to the first week in October, there were no sales above \$5 50, and but few at that price, the range for Pale being \$3 @ \$5 50, and the sales from the last of October to the close of November were chiefly at \$4 @ \$4 50, after which we had no sales of Pale (so called) to report, the transactions being almost entirely confined to the lower grades. The stocks of grades above Common, it will be seen, are large, embracing very few Extra Pale, however, being chiefly composed of No. 1 and Medium.

Tar.—The month of January, 1860, opened with a stock of 2,200 bbls., and a dull and declining market, the nominal quotations being for Washington, Newbern and Wilmington, \$2 44 @ \$2 60 per bbl. in order in yard, the first sale made, however, reducing the range to \$2 25 @ \$2 50 for parcels, taken as it runs, selected, thick, thin, &c., &c., this range being maintained with little variation to the close of the month, at which time a freight engagement of 2,000 bbls. was made for Liverpool. February opened with sales of selected Washington, Newbern and Wilmington for export, at previous range, and as the month progressed, with a small supply, North County, (which we used to designate Washington, Newbern, &c.,) as it runs, brought \$2 31½ @ \$2 42, and selected \$2 50, all in order, in yard; the little Wilmington received brought \$2 50 as it runs, and the month closed with a stock of about 2,500 bbls. In March, prices steadily advanced, the sales of Wilmington being large, chiefly to arrive, at \$2 68¼ @ \$2 75 @ \$2 87½, as it runs, the reported transactions being 7,200 bbls. to arrive, at \$2 75 @ \$2 87½. North County as it runs and selected, on the spot and to arrive, ranged from \$2 31½ to \$2 56½. Stock of all kinds, 3,600 bbls. The demand continued good in April till the third week, with further sales of Wilmington to arrive at \$2 75 @ \$2 87½, as it runs, and 2,000 bbls. selected Roany, for export, at \$2 97; after this, however, the arrivals were pretty large, and though the demand continued, prices fell off to \$2 25 @ \$2 31½ for North County, as it runs, and \$2 37½ @ \$2 50 for ditto, selected; and for a

lot of Wilmington thin, \$2 50 was accepted. In May the demand was moderate for the first two weeks, within the range of \$2 25 @ \$2 50, for all kinds North County, but sales were afterwards made as low as \$2 18½ as it runs, and \$2 25 @ \$2 37½ for selected—3,700 bbls. Wilmington selected, at the close, sold to arrive, at \$2 75, the only sale of this description during the month. Stock in yard, 5,379 bbls. Liverpool quotation 4th May, 16s. for American. In June, prices further slightly declined, North County, as it runs, selling at \$2 12½ @ \$2 18½, and selected, rope, &c., \$2 25 @ \$2 35, closing quietly, with a stock of 4,919 bbls. In July, the business done was all in North County, and at a further decline in value, sales being made the second week as low as \$2 as it runs, the whole range being \$2 @ \$2 12½ in order in yard, with occasional sales at \$2 25, delivered. Stock, at the close, 3,835 bbls. The first week of August, the receipts being small, the stock reduced and little expected, prices advanced 50 cents per bbl., with sales from \$2 12½ up to \$2 62½, the latter price being paid for 500 bbls. North County, for export, as it runs, with lots for consumption at \$2 75 @ \$2 87½, continuing firm within this range to near the close, when \$2 65 @ \$2 75 was accepted for parcels to arrive and on the spot. Stock 2,762 bbls. September opened with a good demand, and an improvement of 10 cents the first two weeks, \$2 75 @ \$2 85 being paid for North County, but from this time prices again fell off, reaching \$2 50 @ \$2 65 for whole lots, as they run, and selected, small lots from yard, as usual, commanding something more—the stock on hand being chiefly taken up. The second week of October, \$2 62½ was paid for North County, as it runs, to arrive and on the spot, and \$2 60 @ \$2 93 for all kinds, in lots as wanted for consumption, the month closing with sales of North County to arrive at \$2 67½ as it runs, and \$2 75 @ \$3 for selected thick, rope, &c., &c., in lots as wanted. Stock, 766 bbls. November opened with a small supply, and about the middle of the month, North County to arrive, brought \$2 75 @ \$2 87½ as it runs, and lots on the spot \$2 85 @ \$3, declining again, however, after the third week, with sales as it runs as low as \$2 50, and selected, rope, shipping, &c., in lots, \$2 85 @ \$2 87½, Norfolk thin and selected, at the same time, bringing \$2 25 @ \$2 50. Stock on hand, 985 bbls. The first week of December, North County as it runs sold at \$2 60, and Norfolk rope \$2 37½, but the second week the market became irregular and lower, Wilmington (the first received in a long time) and North County selling at \$2 25 afloat; subsequently North County declined to \$2 15 and \$2 12½, and Wilmington was taken to arrive at \$2 25; \$2 12½ and \$2 25 being the closing figures to arrive. We may remark that Newbern has generally been preferred, probably because the packages are of a more uniform size, and rather larger than Washington. The shipments of the month were considerable, chiefly to Liverpool, at a freight of 3s. 9d. @ 4s.

The following were the stocks in yard on the first of January :

	1861.	1860.
Turpentine.....	bbls. 6,705	9,000
Spirits Turpentine.....	7,612	8,500
Rosin, common.....	46,162	4,500
“ all other grades.....	61,397	not known.
Tar.....	1,490	2,200

Pitch.—The range of prices, during the year, has been from \$1 50 to \$1 87½ for Southern and City, closing at \$1 70 for City, delivered. The lowest sales were made in October, viz., \$1 50 @ \$1 55 for Southern, on the wharf.

MONTHLY AVERAGE OF PRICES.

Months.	1880.				1889.			
	Turpen- tine.	Spirits Turpentine.	Rosin.	Tar.	Turpen- tine.	Spirits Turpentine.	Rosin.	Tar.
January,	\$ 47	44½ c.	\$ 1 62½	\$ 40	\$ 73	49½ c.	\$ 1 70	\$ 55
February,	56½	46 7-16	1 62½	40	83	49½	1 75	71
March,	58½	47½	1 66	57	89	53	1 78	87
April,	48½	45 18-16	1 61½	60½	98	58 1-5	1 70	44
May,	56	46½	1 60	50	75	59	1 74	43
June,	57½	43½	1 55½	53½	79	47½	1 85	33
July,	51½	38½	1 52½	23½	65	45½	1 79	44
August,	51½	39½	1 43½	2 65½	41	44½	1 66	73
September,	54½	40	1 89½	2 65	56	46½	1 56	64
October,	58	40 15-16	1 47½	2 73½	63	47	1 57	65
November,	57	39 1-16	1 89½	2 83½	57	48	1 55	63
December,	76	38½	1 21½	2 45	47	44½	1 57	66
Aver. for year, ..	\$ 57½	42½ c.	\$ 1 51 3-10	\$ 58	\$ 68	48 1-5 c.	\$ 1 68	\$ 58
" 1880,	68	43 1-5	1 63	58	....	....	....	....
" 1888,	70	47½	1 56	2 18	....	....	....	....
" 1887,	60	46½	1 73	2 01	....	....	....	....

N. B.—The quotations of Common Rosin, as given above, are for parcels delivered from yard; lots in yard or afloat are sold at 5 cents less.

The average prices of Spirits Turpentine, as given above, are for Southern straight lots and shipping order, poor and rejected lots always selling at irregular prices, while New-York packages generally command one cent more than Southern straight and shipping order. The monthly average prices of New-York barrels alone were as follows: January, 45 1-16 cents; February, 47½; March, 48 1-5; April, 46 11-16; May, 47 11-16; June, 44 5-16; July, 40½; August, 40 3-16; September, 41½; October, 42 5-16; November, 40 1-16; and December, 34½. Average for the year, 43 1-6 cents.

WILMINGTON, N. C.

SHIPMENTS FROM JANUARY 1 TO DECEMBER 31.

	1880.		1889.	
	Foreign.	Coastwise.	Foreign.	Coastwise.
Turpentine,	28,548	52,175	12,717	66,797
Spirits Turpentine,	20,400	127,562	9,471	137,740
Rosins,	57,425	440,133	22,881	555,636
Tar,	6,120	43,056	855	40,255
Pitch,	784	5,489	1,065	7,174

JOURNAL OF NAUTICAL INTELLIGENCE.

THE BRITISH NAVY.

THE following return, made by the Comptroller of the Navy, shows the number of her Majesty's steamships afloat, building and converting, and the number of effective sailing ships afloat on the 1st of February :

CLASS OF SHIPS.	STEAM.			Effective Sailing Ships Afloat.	Total Steam and Sailing.
	Afloat.	Building or con- verting.	Total.		
Ships of the line, screw,	53	14	67	*10	77
Frigates, screw,	31	12	43	†17	69
Ditto, paddle,	9	..	9	..	9
Block ships, screw,	9	..	9	..	9
Iron-cased ships, screw,	1	6	7	..	17
Corvettes, screw,	19	4	23	..	23
Sloops, screw,	58	14	72	18	125
Ditto, paddle,	35	..	35	..	..
Small vessels, screw,	3	..	3	1	25
Ditto, paddle,	21	..	21	..	..
Gun-vessels and gunboats, screw,	139	4	193	..	195
Despatch vessels, paddle, ...	..	2	2	..	..
Floating batteries, screw, ...	8	..	8	..	8
Transports, troop-ships, ten- ders, yachts, &c., screw, ...	17	1	18	..	66
Ditto, paddle,	48	..	48	..	..
Mortar ships, screw,	4	..	4	..	4
Mortar vessels and floats, ...	..	..	..	83	83
Total screw,	392	55	447	..	..
Total paddle,	113	2	115	..	..
Grand total,	505	57	562	129	688

AN EGYPTIAN FRIGATE.

For some time past considerable consternation has prevailed in Liverpool, owing to rumors that a fever of the most dangerous and fatal description had been introduced into the town by the crew of an Egyptian frigate which lately arrived here from Alexandria. As some of the officials of the Liverpool Southern Hospital and Paul-street Baths had died from malignant fever, the Health Committee ordered their officer to make a report to them on the subject; and, at their meeting in March, Dr. DUNCAN presented a report, from which we extract the following passages: The Egyptian steam frigate SEBAAB GEBALD arrived in the Mersey on the 22d of February, after a lengthened voyage from Alexandria, during which

* Eight of these and two from the non-effective list are fit to be converted into block ships.

† Four of these are fit to be converted.

‡ One of these ships has just been commenced at Chatham, and tenders for two others have been accepted.

the crew, numbering over 300, crowded together and in a most filthy state, suffered severely from the cold of a northern winter, being unprotected by European clothing. On their arrival about eighty were on the sick list, suffering chiefly from dysentery, diarrhoea, frost-bite, &c.

THE BRITISH LIGHT-HOUSE COMMISSION.

An important state document has recently appeared, being the report of the Royal Commission appointed at the close of 1858 to inquire into the condition and management of the lights, buoys and beacons of the United Kingdom. Through the medium of printed categorical circulars and the general post the commission has acquired a vast amount of information at a wonderfully small cost, from mariners, merchants, scientific men, manufacturers of illuminating apparatus and foreign governments, besides which they have personally visited upwards of two hundred light-houses on the coasts of the United Kingdom, the Channel Islands, France and the northern coast of Spain. It turns out from inquiry that "they manage these things better" and more scientifically in France and America. Taking lightships into account, however, the coast mileage lighted shows a rather better proportion for England than France; but as scientific men have the direction of the lights in France, they are placed "so as to cross their fire," and be thus more serviceable to the foreigner, while, as a general rule, the lights are of a better quality, through more attention being paid to the size and bearing of the flame. More attention to these points is paid in Scotland than either in England or Ireland, but it is satisfactory to know that we possess some of the very finest lights in the world. In the United Kingdom there are 404 lights—357 on shore, 47 floating; 197 of them under general and 160 under local authority. The commissioners suggest various improvements in detail, such as the adoption of more red lights in place of any other color, but what is ordinarily termed "white;" but their chief recommendation is that the whole of the lights should be placed under a central board of four members, one to be chosen by the Board of Trade, to be denominated "The Trinity Commissioners for Lights," to include, also, as *ex officio* members, the Astronomer Royal, the Hydrographer to the Admiralty and the Comptroller-General of the Coast Guard. Indeed, the commissioners believe that the Coast Guard establishment may be made of great assistance in carrying out the lighting service of the kingdom. The new board would supersede the Board of Trade, the Trinity House, the Commission of Northern Lights, (Scotland,) and the Dublin Ballast Board, whose authority at present clashes very detrimentally. The proposed body would be represented in the House of Commons either by the Admiralty or the Board of Trade, so far as presenting the annual estimates of the expenditure of the establishment, and answering any questions, but, after the estimates have once passed the House, the central board will have the entire control of the expenditure and management. As to the vexed question of the abolition of light-dues on shipping, the commissioners offer no decided opinion, but appear to favor the principle already recommended to the legislature by four special committees, viz., that the expense of erecting and maintaining our light-houses should be defrayed out of the public revenue.

DRUMMOND LIGHT.

The Drummond Light is thus described by Mr. BAXTER, in a recent number of "Recreative Science." It is often called the Lime Light:

This brilliant light was the invention of Lieut. DRUMMOND, and was applied by him in conducting the Ordinance Survey in Ireland and Scotland in 1826. Its intensity was such that it was proved by him to be distinctly visible at a distance of ninety-five miles. It is so purely white that the most delicate shades of color may be distinguished by it as correctly as by daylight; while for photographic purposes it is invaluable, as it enables the photographer to work by night as easily as by day. To what extent this light is possessed of actinic properties, or whether this apparent power is due to the total absence of color in its composition, I will leave others to decide. I shall here only attempt to describe the best form of lime light apparatus which is yet known to the scientific world. The lime light gives out but little heat, and does not in any manner vitiate or consume the oxygen of the surrounding atmosphere; hence it is just the kind of light required for crowded rooms, factories, mines, tunnels; in short, wherever it is an object to limit the natural consumption of oxygen.

As a proof of this, I may state that a five-jet lamp, belonging to the Universal Lime Light Company, which was exhibited in the Society of Arts Lecture Room, consumed thirty-six cubic feet of the combined gases in an hour, and did not increase the temperature of the room during that length of time. It gave a more pure and powerful light than their large chandelier, which was subsequently lighted, and which consumed five thousand cubic feet in the hour; the temperature of the room kept increasing, and the atmosphere was vitiated to an unbearable degree at the end of that period. It is hardly necessary to observe that, in common with all other lights of great intensity, it may be used for signal lights, its peculiar steadiness and continuity giving it the advantage over its rival, the electric light. For use at sea, or by the coast guard in case of wreck, and in cases where life and property are at stake, cheapness is a matter of no consideration for a light of this nature; still, where cheapness is combined with utility, the lime light has precedence over all lights, its cost being in pence where others cost pounds. Owing to the total absence of color, it is not only applicable to photographic purposes, but also for picture galleries, shops, &c., &c. It is found to separate the most delicate shades of color, and, what is of more importance, it does not in the slightest degree injure the most delicate fabrics. A single jet of the medium size is equivalent to forty argand, or eighty fish-tail gas-lights, or four hundred wax candles; while its cost is from a halfpenny to five pence an hour, according to the quantity of combined gases consumed, the augmentation of which increases the power of the light. For instance, twice the quantity of gas consumed per hour will give, not twice, but *four* times the amount of light. Comparing it with the illuminating power of common gas, a single jet, consuming four cubic feet of the combined gases per hour, equals that obtained from four hundred feet of coal gas.

STEAMBOAT DISASTERS ON WESTERN RIVERS.

The following (from the *St. Louis Bulletin*) is a summary and detailed statement of accidents and disasters to steamboats, barges, canal and coal boats, and other river craft, on the Western rivers during the year 1860. The number is unusually large, and the loss of life attending the disasters is also above the average of former years. The following is a synopsis of the statement :

Number of steamboats destroyed and damaged,.....	299
Number of canal boats and barges,.....	48
Coal and flat boats,.....	208
Steamboats totally destroyed,.....	120

The disasters are attributed to the following causes :

Sunk,.....	111	Damaged by storm,.....	39
Burned,.....	31	Breaking machinery,.....	21
Explosion,.....	19	Collisions with river bank,.....	8
Collision,.....	24	Total loss of life,.....	254
Snagged and damaged,.....	44		

The total loss in steamboat property, including canal boats, coal boats and barges, exceeds \$2,000,000. The loss on cargo cannot be ascertained.

THE BRITISH AND AMERICAN LIFE-BOAT SOCIETIES.

It is gratifying to record the interchange of courtesies and good offices between the societies of England and the United States, having the common object of humanity and of ameliorating the lot of those whose lives are periled on the great deep.

A few months ago the National Life-boat Institution presented, through Mr. R. B. FORBES, to the Massachusetts Humane Society, a beautiful model of its life-boat, and a complete set of the journal of its transactions. The British Life-boat Institution also forwarded its thanks, inscribed on vellum, to Miss DIX, an American lady, in acknowledgment of her long and valuable services in the cause of humanity, and particularly of her zealous exertions in aiding to establish four life-boats on the British possession of Sable Island, on the coast of North America. At a general meeting of the American Society, held at Boston, Massachusetts, the Hon. DAVID SEARS, President, in the chair, these presents were thus suitably acknowledged :

"The trustees of the Massachusetts Humane Society desire to reciprocate in the most cordial manner the respect and kind feeling on the part of the British Royal National Life-boat Institution, and to express their readiness to co-operate with it in all practicable ways, and especially in the interchange of information and suggestion, for the promotion of the humane objects common to both societies. They look with satisfaction on every event, whether of individual, social or international courtesies, which help to preserve and strengthen friendly relations between the people and governments of England and the United States. They have shared largely in the universal enthusiasm and kind feeling awakened among all classes of our citizens by the recent visit to this country of his Royal Highness the Prince of Wales, and cherish the hope that this event, so interesting in itself, is destined to be prominent and beneficent in the

influence it will exert to bind us together in strong and enduring amity, so that the two great nationalities of the Anglo-Saxon race, distinct in the forms, but in many respects similar in the spirit of their institutions, with a common lineage, language and literature, may ever be one undivided power on the earth, exerted always in behalf and for the promotion of the highest and best interests of mankind. (Signed,)

S. K. LOTHROP,

Corresponding Secretary of the Massachusetts Humane Society.

NEW LIGHT-HOUSES.

Official communications from the Light-House Board at Washington.

THORNTON A. JENKINS, U. S. Navy, Secretary of the Light-House Board.

THE MEDITERRANEAN.—1. *Fixed Light at the Mouth of the Ebro.*—Official information has been received that on and after the 15th day of September, 1861, a light will be exhibited from a temporary light-house, erected on Cape Tortosa, which forms the eastern extremity of Buda Island, or of the Delta of the river Ebro. The light is a *fixed white* light, and is visible on all points seaward through an arc of 270° , or between the bearings of N. E. by E. $\frac{1}{2}$ E. round by W. to S. S. E. $\frac{1}{2}$ E. It is placed at an elevation of 34 feet above the mean level of the sea, and should be seen in clear weather, from the deck of a ship, at a distance of 11 miles. The illuminating apparatus is dioptric, or by lenses, of the fifth order. The tower is a skeleton wood-work, 31 feet high, surmounted by a lantern with a white top; and twenty yards to the westward is the keeper's dwelling, which is a hut thatched with reeds. The tower stands in lat. $40^\circ 43' 0''$ N., long. $0^\circ 56' 54''$ east of Greenwich. The bearings are magnetic. Variation $18^\circ 30'$ W. in 1861.

2. *Fixed Lights on the Pedagne Rocks, Brindisi.*—On and after the 31st day of January, 1861, a light will be exhibited from a light-house erected on the northwestern of the Pedagne rocks at the entrance of Brindisi harbor. The light is a *fixed white* light, varied by a flash once every three minutes; the flash is preceded and followed by a short eclipse. The elevation of the light is 72 feet above the mean level of the sea, and it should be seen in clear weather, from the deck of a ship, at a distance of 13 miles. The illuminating apparatus is dioptric, or by lenses, of the fifth order. The tower is a column rising from a small circular building 36 feet high and colored white. Its position is given as lat. $40^\circ 39\frac{1}{2}'$ N., long. $17^\circ 59' 32''$ E., or two miles westward of the longitude in the Admiralty charts.

3. *Revolving Light on Point Torre di Penne.*—Also, that a light will be exhibited from a light-house erected on Point Torre di Penne, near Brindisi, on the southeast coast of Italy. The light is a *revolving white* light, attaining its greatest brilliancy every half minute; the elevation of the light is 129 feet above the mean level of the sea, and should be seen in clear weather, from the deck of a ship, at a distance of 20 miles. The illuminating apparatus is dioptric, or by lenses, of the third order. The tower is circular, 82 feet high, and colored white; and at the foot of it is a rectangular building. Its position is given as lat. $40^\circ 41' 05''$ N., long.

17° 56' 18" east of Greenwich, or 3 miles westward of the longitude in the Admiralty charts.

SPAIN AND FRANCE.—4. *Fixed White Light at Llanes*.—On and after the 30th day of September, 1861, a light will be exhibited from a light-house recently erected on Point San Antonio, on the southern shore of the mouth of the estuary of the Llanes, in the province of Oviedo, on the north coast of Spain, in the Bay of Biscay. The light is a *fixed white* light, placed at an elevation of 64 feet above the mean level of the sea, and should be visible in clear weather, from the deck of a ship, at a distance of 9 miles. The illuminating apparatus is dioptric, or by lenses, of the sixth order. The tower, which is octagonal and 26 feet high, is attached to the north front of the keeper's house, and both are painted white. Its position is in lat. 43° 26' 45" N., long. 4° 45' 31" west of Greenwich.

5. *Fixed and Flashing Light at Cartaya*.—On and after the 1st day of April, 1861, a light will be exhibited from a light-house recently erected at a place called Rompido de Cartaya, on the left bank, at the entrance of the river of Las Piedras, on the southwest coast of Andalusia. The light is a *fixed white* light, varied by a flash every four minutes. It is placed at an elevation of 79 feet above the mean level of the sea, and should be seen in clear weather, from the deck of a ship, at the distance of 14 miles. The illuminating apparatus is dioptric, or by lenses, of the third order. The tower is circular, 36 feet high, and of a yellow color; it is surmounted by a lantern painted green. It stands in the centre of the southern face of the keeper's dwelling, which latter is square. The position of the tower is in lat. 37° 11' 5" N., long. 6° 58' 25" west of Greenwich.

6. *Red Lights at the entrance of the Guadiana*.—On and after the 1st day of May, 1861, two new lights would be exhibited on Canela Island, near Canela Point, on the left bank of the mouth of the River Guadiana, to aid in crossing the Bar of Ayamonte. The lights are *fixed red* lights. The northern of the two is placed at an elevation of 22½ feet, and the southern one 21 feet above the mean level of the sea, and should be visible in clear weather, from the deck of a ship, at a distance of 8 miles. Each light is placed on a column to the eastward of the light-house keeper's dwelling. The position of the lights is in lat. 37° 10' 30" N., long. 7° 16' 38" west of Greenwich, and 3 miles from the bar. They are changed whenever the position of the bar alters.

7. *Green Lights at Cristina Island*.—On and after the 1st day of March, 1861, two new lights would be exhibited from La Punta, or the point to the south of the town of Isla Cristina, for crossing the bar at that place. The lights are *fixed green* lights. The northern one is placed at an elevation of 26 feet, and the southern one 16 feet above the mean level of the sea, and should be seen in clear weather, from the deck of a ship, at the distance of 7 miles. Each light is placed on a column to the eastward of the light-keeper's dwelling. The position of the lights is in lat. 37° 10' 45" N., long. 7° 13' 45" west of Greenwich, and one mile from the bar.

8. *Alteration of Lights at Huelva*.—On and after the 1st day of March, 1861, two new lights would be placed on Punto del Padre Santo, on the

east shore of the mouth of the River Odiel, in lieu of those now in use. The lights are *fixed white* lights. The northern one is placed at an elevation of $27\frac{1}{2}$ feet, and the southern one $16\frac{1}{2}$ feet above the mean level of the sea, and should be seen in clear weather, from the deck of a ship, at a distance of 8 miles. Each light is placed on a brown column to the westward of the light-keeper's dwelling. The position of the lights is in lat. $37^{\circ} 7' 30''$ N., long. $6^{\circ} 47' 25''$ west of Greenwich, and three-quarters of a mile from the bar.

9. *Red Light on the Sénéquet Rock*.—On and after the 20th day of February, 1861, a light will be exhibited on the tower recently built on the Sénéquet Rock, in the Déroute Passage, about 6 miles north of Regneville, on the west coast of the Department of La Manche. The light will be a *fixed red* light, placed at an elevation of 55 feet above high water, and should be visible from the deck of a ship, in clear weather, at a distance of 10 miles. The tower stands in lat. $49^{\circ} 5' 32''$ N., long. $1^{\circ} 39' 49''$ west of Greenwich.

10. *West Coast—Change in the Biarritz Light*.—The Biarritz Light, which now revolves once every 30 seconds, will be changed to a light revolving every 20 seconds, showing alternately a *white* and *red* face, which should be visible in ordinary weather at a distance of 22 miles. Biarritz light tower stands about $2\frac{1}{4}$ miles southwest of the entrance of the River Adour, in the southeastern part of the Bay of Biscay, lat. $43^{\circ} 29' 38''$ N., long. $1^{\circ} 33' 19''$ west of Greenwich.

11. *Lights at the Port of Cette*.—On and after the 15th day of February, 1861, the following changes will take place in the position of the lights of the port of Cette, on the south coast of France, in the Mediterranean: 1. The great fixed light of the port will be changed to the tower recently built in the centre of St. Louis mole-head. It will be placed at a height of 105 feet above the mean level of the sea, and should be visible from the deck of a ship, in an ordinary state of the atmosphere, at a distance of 15 miles. The tower, which is 88 feet high, stands in lat. $43^{\circ} 23' 50''$ N., long. $3^{\circ} 42' 1''$ east of Greenwich. 2. The two small lights vertical on the sea-mark near Fort Richelieu will be changed to the southwest angle of that fort, at about 840 yards W. by N. $\frac{1}{4}$ N. of the Mole-Head Light, so as to form with it leading lights for the eastern entrance of the harbor. These lights, which will be elevated 272 feet above the level of the sea, will be visible at a distance of 4 miles in ordinary weather; but they blend and appear as one light when beyond the distance of one mile and a half. They will be replaced at a later period by lights which will be established, one on the extremity of the Frontignan Jetty, the other on the northeast pier head of the detached briselame or breakwater which shelters the entrance of the port. All bearings are magnetic. Variation $17^{\circ} 35'$ W. in 1861.

BALTIC—GULF OF FINLAND.—12. *Lights at Kronstat*.—The following alterations will be made in the lights at Kronstat, prior to the opening of the navigation in the spring of 1861: The three fixed lights in the centre of the fort of Emperor PAUL I., or Risbank Fort, will be discontinued. The eastern light on Nicholas Battery, at Kronslot, which is now 45 feet above the mean level of the sea, will be raised 58 feet above the same level, and should be visible from the deck of a ship, in clear weather, at a

distance of 12 miles. The western light, which is now 21 feet above the mean level of the sea, will be raised 23 feet. This increase of height will make no alteration in the horizontal arc through which the light will be visible.

13. *Werko Matala Beacon, off Biörkö*.—A red beacon has been placed on the southeast side of the Werko Matala or bank, near the entrance of Biörkö Sound, with the tower on Pitko-nemi or point W. S. W. $\frac{1}{4}$ S., and the northeast point of Biörkö N. W. northerly. The white beacon on the eastern part of the bank will be removed. The bearings are magnetic. Variation at Biörkö, $6^{\circ} 20'$ W. in 1861.

THE RED SEA.—14. *Revolving Light on Perim Island, Strait of Bab-el-Mandeb*.—On and after the 1st day of April, 1861, a light will be exhibited from a light-house recently erected on Perim Island, in the Strait of Bab-el-Mandeb, at the entrance of the Red Sea. The light is a *white revolving light*, attaining its greatest brilliancy once in four minutes. It is placed at an elevation of 241 feet above the mean level of the sea, and should be seen in clear weather, from the deck of a ship, at the distance of 22 miles. The position of the light-house is on moderately high ground, about 1,100 yards to the southwest of the northeastern bluff point of the island, and stands in lat. $12^{\circ} 40' 20''$ N., long. $43^{\circ} 28' 10''$ east of Greenwich.

CUBA.—15. *St. Jago de Cuba*.—The light-house on the Morro of St. Jago de Cuba, lat. $19^{\circ} 57' 29''$, and long. $69^{\circ} 43' 12''$ west of Cadiz; the light that formerly existed there has been replaced by a fourth order lens of the system of Fresnel, showing a revolving white light, with flashes at intervals of two minutes. The light is elevated about 222 feet above the mean level of the sea, and should be seen, under ordinary circumstances of weather, at a distance of about 21 nautical miles.

THE PACIFIC AND AUSTRALIA.—16. *Flashing Light on the Race Rocks, Vancouver Island*.—On or about the 1st January, 1861, a light would be exhibited from a light-house recently erected on the Race Rocks, in Juan de Fuca Strait, at the southeast extreme of Vancouver Island. The light is a *flashing white light*, showing a bright flash every *ten seconds*, placed at an elevation of 118 feet above the level of the sea at high water, and should be seen in clear weather, from the deck of a ship, at a distance of 18 miles. The illuminating apparatus is dioptric, or by lenses, of the second order. The tower stands in lat. $48^{\circ} 17' 30''$ N., long. $123^{\circ} 32' 15''$ west of Greenwich.

17. *Directions for Esquimalt and Victoria Harbors, by Captain RICHARDS, R. N.*—The Race Rocks tower can be distinctly seen at the distance of 12 miles. On nearing it vessels should round it at a distance of from half a mile to a mile; the outermost danger is a rocky patch of 5 feet, lying S. E. by E., between 3 and 4 cables from the Great Race. On rounding the Race islands, Fisgard Island fixed light will be seen, and should be steered for, on a bearing N. $\frac{1}{4}$ W., which will lead clear of the reef extending a short distance off Albert Head. Keep the bright light in full view; if a vessel gets too far to the westward it will appear dim, and shortly become shaded or green, when she should immediately steer out to the eastward until it again shows bright. This precaution is especially necessary on account of the tides, which, during springs, run as much as 6 knots in the neighborhood of the Race Rocks; the ebb runs almost in

a direct line from Haro Strait to the rocks, and sets between them and the shore. There are also tide-races in the vicinity, dangerous for boats or small craft. When to the northward of Albert Head, and desiring to anchor in Royal Roadstead, a vessel should bring Fisgard Island light to bear N. by W., when she will have 10 fathoms good holding ground, or, if desired, she may stand to the westward until the light becomes shaded green, when she should *immediately* anchor. Entering Esquimalt harbor the light should be left from one to two cables' lengths on the port hand, and when it bears S. by W., at a convenient distance, a ship may anchor in 7 fathoms, or stand into Constance cove if preferred. When the light bears N. W. by W. it changes from bright to red, and shows the latter color within the harbor. Entering Esquimalt from the eastward, the light should not be steered for until it shows bright, which is the mark for clearing Brotsky Ledge and the Scrogg Rocks; when the light changes from red to bright, it leads about half a cable clear of the Scrogg Rocks. The course for the entrance of Victoria harbor, after rounding the Race light-house, is N. $\frac{1}{4}$ E., (allowing for tides,) and when Fisgard Island light changes from bright to red a vessel will be scarcely a mile from the shore. Ships, however, above the size of coasters, unless acquainted with the neighborhood, are recommended not to run for Victoria harbor at night, when they would not be able to enter; but rather to anchor in Royal Roadstead for daylight. With S. E. winds and stormy weather a ship should invariably run into Esquimalt harbor, which she can do with great facility by the assistance of the light on Fisgard Island. The bearings are magnetic. Variation $22^{\circ} 4'$ in 1861.

18. *Fisgard Island—Light at Esquimalt.*—On the 19th November, 1860, a light was exhibited from a tower recently erected on the summit of Fisgard Island, at the entrance of Esquimalt harbor. The light is a *fixed* light, and is visible through an arc of 220° . It shows *green* when bearing between N. by E. $\frac{3}{4}$ E. and N. $\frac{1}{4}$ W., *white* from N. $\frac{1}{4}$ W. to N. W. by W. $\frac{1}{4}$ W., and *red* towards the harbor, or from N. W. by W. $\frac{1}{4}$ W. round by W. to S. $\frac{1}{4}$ E. It is placed at an elevation of 70 feet above the level of the sea at high water, and should be seen in clear weather, from the deck of a ship, at a distance of 10 miles. The illuminating apparatus is dioptric, or by lenses, of the fourth order. The building consists of a keeper's dwelling of brick, with a tower 57 feet high, whitewashed, and surmounted by a lantern painted red. Its position is in lat. $48^{\circ} 25' 38''$ N., long. $123^{\circ} 27' 10''$ west of Greenwich. The bearings are magnetic. Variation in 1861, $22^{\circ} 5' E.$

19. *Change of Light on Glenelg Jetty.*—On and after the 1st day of December, 1860, a permanent *green* light would be exhibited at the outer end of Glenelg Jetty, Gulf of St. Vincent, instead of the red and white occasional light hitherto shown. The light is a *fixed* green light, elevated 29 feet above the level of the sea at high water, visible in all directions seaward, and should be seen from a distance of 6 miles. The position of the light is in lat. $34^{\circ} 59' 30'' S.$, long. $138^{\circ} 33' E.$ of Greenwich. Vessels anchoring off Glenelg Jetty should bring the light to bear E. by N., and anchor in not less than 5 fathoms. Coasters may approach the end of the jetty very closely, but care should be taken to avoid a shoal patch on an oyster bank lying about a mile to the southward of the township. There is a depth of $10\frac{1}{4}$ feet at the end of the jetty at low water of spring tides. The bearings are magnetic. Variation $5^{\circ} 20' E.$ in 1861.

SUBMARINE TELEGRAPHIC CABLES.

Official information has been received by the Light-House Board, Washington, from the Ministry of Marine at Copenhagen, Denmark, that submarine telegraphic cables have been laid down, besides at the places formerly brought to notice in the Sound and the Belts, also at the following places :

I. *In the Great Belt.*—The telegraphic cable earlier laid down is situated in the following marks: Two white-painted beacons, erected on "Knudshovedlandet," in Fyen, in the direction of W. $\frac{1}{2}$ S. and E. $\frac{1}{2}$ N. to one another, mark the line from this point to the Sprogö West Reef, and two on the Sjælland side erected white-painted beacons, in the direction of W. $\frac{1}{2}$ N. and E. $\frac{1}{2}$ S. to one another, mark the line over the "Ostre-Rende." South of Sprogö, buoys have been laid down for the purpose of indicating the situation of the cable at that place. A quarter of a mile to the north of the above-mentioned cable, a new telegraphic cable has been laid down, which, starting from what is called the "Stjerneskanse," (Starfort,) E. of Nyborg, in the direction of E. and W. north of Sprogö, in $3\frac{1}{2}$ fathoms water; herefrom passes over to Halskov, north of Halskov Reef, in the direction of E. $\frac{1}{2}$ S. As well on Fyen as on Sjælland, the situation of the cable is marked by two great white-painted beacons, and at the coast of Sprogö, where the cable passes nearest to the land, by a great nun buoy, with a white pole and flag.

II. *In the Little Belt.*—Between "Boyden," on Fyen, and "Fyenshav," on Als, a telegraphic cable is laid down, the situation of which, on either shore, is marked by two great white-painted beacons. The direction of the cable is—the beacons held in one in S. W. and N. E.

III. Between Sjælland, Möen, Falster and Lolland, the following telegraphic cables are laid down :

1. Between the ferry bridges at Kallehauge, on Sjælland, and Koster, on Möen, in the direction of N. $\frac{1}{2}$ E. and S. $\frac{1}{2}$ W.

2. In "Grönsund," between the ferry bridge on Möen and Falster, in the direction of N. to E. and S. to W.

3. Between Nikiöbing, on Falster, and Sunby, on Lolland, in the direction of W. S. W. $\frac{1}{2}$ W. and E. N. E. $\frac{1}{2}$ E.

At Koster, Grönsund, on Falster, and Sunby, on Lolland, two white-painted beacons are erected at each place, which, held in one, mark the line of the telegraphic cables. All mariners are requested not to anchor over or in the vicinity of the above-mentioned telegraphic cables, as any person, wilfully or by negligence, damaging the same, shall be made answerable to punishment and indemnification in accordance with the laws.

SAVING THE CREWS OF STRANDED VESSELS.

A series of exceedingly interesting experiments, having for their object the providing a certain means of communication between stranded vessels and the shore as a means of preserving the lives of their crews at a time when communication by boat would be impossible, was brought to a close at Portsmouth, in a most satisfactory manner, in March last. The

trials have extended over a period of some months, and the means proposed to be employed have been tested in every possible way by the gentleman who has suggested, in fact, carried it out at his own expense, Lieutenant G. S. NARES, senior lieutenant of Her Majesty's ship *BRITANNIA*, Captain ROBERT HARRIS, the naval cadet training ship in Portsmouth harbor. Lieutenant NARES employs the common kite principle as his chief agent; but while he sends his kite away to leeward, and consequently towards the shore, he retains the means on board the stranded vessel of bringing down the kite when flown sufficiently beyond the beach, or over the cliff, so that the line attached to the kite may be hauled upon by the people on shore, and the end on board the vessel being attached to a hawser, and the latter on reaching the shore being hauled up the cliff, a means of escape to the crew and passengers, however numerous they may be, so long as the vessel holds together, or however violent may be the surf which intervenes between the ship and the land, is open to all with the most perfect safety by a boatswain's cradle, basket or slung cask, being attached to the hawser, and hauled backwards and forwards by the people of the vessel and those on shore. To bring the kite to the ground when sufficiently advanced beyond the face of a cliff or high-water mark, Lieutenant NARES has a second line attached to the right angle of the kite; holding on to this line, and letting go the flying line of the kite, the latter instantly capsizes and descends to the earth. This mode is applicable to the rescue of the crew of a vessel which has been driven well on shore, but is in a position, either from the surf or the formation of the coast, in which no vessel can approach her. Another mode in which this life-kite may be used, is where it may be able to effect a landing on a beach to leeward, but the boats are washed overboard or stove, or the position in which the vessel may lie on a bed of rocks may render boats useless. In this case the flying-line of the kite is attached by a toggle to the bung-hole of a cask, to a couple of breakers with a boat's mast lashed athwart them, or round a man's chest, with the knot between his shoulders; in either case the kite finds the supporting power, and conveys the object its line is fast to on shore, another line being attached to the cask, raft or man from the vessel, and the communication with the shore is complete. The particular credit due to Lieutenant NARES consists in his having, by his second line, devised a means of bringing the kite to the ground at the moment required, and in also making use of the kite in attaching its flying line to an object in the water, a carrier of his hawser's hauling line to the people on the shore. Kites have been tried before, but have failed for the want of these two great requisites. A few years since a vessel drove on shore on the Devon coast, close under the land. The captain sent up a kite, which flew over the people's heads on the shore, but they had no means of reaching it, and the whole of the unfortunate crew perished in the sight of the people on shore, who were there ready to aid them could the line from the kite overhead have reached their hands. In March last the brig *MERCY*, of Bristol, was wrecked at Porthleven, in Mount's Bay. A tremendous surf was running, but to save the crew it was necessary to form some communication otherwise than by boat. A cask was thrown overboard among the breakers, with a small line attached, and was, after great difficulty and risk of life on the part of the people on shore, got hold of, and a hawser hauled on shore, to which a swung basket was

attached, and the crew were saved. In this case the kite would have conveyed the cask to the people on the beach without their having to risk their lives by running into the breakers and surf to lay hold of it. The concluding experiments by Mr. NARES were made from Her Majesty's steamer BULLFINCH, Lieutenant JAMES. The BULLFINCH on this occasion was 600 yards from the shore, and the experiments answered perfectly. Lieutenant NARES has presented his plan to the Shipwrecked Fishermen's Society, and also the 50 guineas which had been awarded him.

LEAKY VESSELS.

A Liverpool paper gives the following account of an ingenious application of the screw principle, which has recently been tried on the Mersey. It consists of a very cheap and simple apparatus (which can be stowed away in a box) for pumping leaky vessels, and which may, probably, in a three-knot stream, assist in loading or unloading cargo. This invention has deservedly met with considerable commendation from the government emigration officer, Lieutenant PRIOR, R. N., by the surveyors of LLOYD'S, and of many other practical men who have seen it in operation. The inventor is Mr. ROBERT FORMBY, son of the oldest and most eminent physician in this town. The apparatus, which has been made for a vessel of 500 tons, consists of a two-bladed screw of a semi-disc form; it is attached to a jointed rod, which gives motion to the axle of a small-toothed bevel wheel, fixed on the vessel's deck right astern, and completely out of the way of all traffic. This again works another wheel on the end of a shaft extending longitudinally along the bulwarks, and connecting with the lower limb of a bell-crank working about six feet from the deck, the upper limb of which is connected by a rod with an upright arm springing from the centre of a horizontal lever-beam, to the end of which the pump rods are jointed. When the vessel is going three or four knots an hour the action of the pumps, the stroke of which can be increased or diminished in a minute, is rapid, and causes a discharge of water nearly equal to the quantity a body of men could pump. At six or seven knots speed the quantity is considerably increased, and nearly fills the nozzles. Considering that the screw never tires, this result exhibits a great advantage over manual labor. By a very simple arrangement the pumps are prevented from choking, as ships' pumps general do. The apparatus can, by a very simple movement, be thrown out of gear. The method of stopping the rotatory motion of the screw previous to hauling it in is very simple. An "extinguisher," formed of sheet iron of a lamp-shade shape, is placed on the rod connected with the screw, and rapidly descends, occasioning an immediate stoppage. It can then be hauled in without difficulty. When we consider, that in the month of October thirty-nine vessels foundered through springing leaks, and that the severe labor of pumping tends greatly to occasion sickness among seamen, and consequent incapacity for other necessary work, the advantages of this invention must surely be patent to the mercantile world.

RAISING SUNKEN VESSELS.

It is well known that the expense of the ordinary method of raising sunken vessels is such, that in many cases all attempts are abandoned,

and valuable property is sacrificed and irrecoverably lost. It is said that in certain circumstances this loss may be prevented and the sunken vessels recovered in the following manner: At low water, a number of empty casks or air-tight caissons, or one or two ships or barges, are to be attached by strong ropes or hawsers to parts of the sunken ship, and the ropes hove in tight. As the tide rises, the vessels become more and more immersed in the water, until the weight of the additional volume of water displaced by the whole of them equals the force necessary to raise the ship. When the tide is nearly at its height, the vessels, with the sunken ship under them, are removed towards the shore, until she touches the ground again. If the ship be then in such a position that the falling tide will leave her above water, when at its lowest, the vessels are cast off; but if not, they are hove down as before, and the process described is repeated. The number of air-tight vessels may be thus approximated to. On the sunken ship, the pressure downward is the weight of the ship and of the cargo; and the pressure upward is the weight of a volume of water equal to that occupied by the material of the ship and by the cargo. If the ship be built of wood, the specific gravity of the mass could not much exceed unity—that is, the weight of the whole mass would be about the same as that of an equal volume of water. There would then remain to be overcome by the water-tight vessels a pressure equal to the weight of the cargo when placed in water. When this pressure is found, there must be a number of water-tight vessels, such that their weight, together with the weight of cargo when in water, shall equal the weight of the volume of water displaced by these vessels. This method is reported to have been successfully adopted for the recovery of several small vessels.

FLOGGING IN THE BRITISH NAVY.

A return has been made public of persons flogged in the navy in the year 1859. The total number of persons flogged was 951, and 30,329 lashes were inflicted. The highest number of lashes given was 50, while six marks the lowest. The *BRUNSWICK* has the unfortunate distinction of supplying the highest return, viz.: 1,194 lashes, which was supplied to 30 men. The *LIFFEY* ranked next to the *BRUNSWICK*, 27 men having on board her received 954 lashes; and the *Spr*, a wretched little brigantine, with only 45 men, actually shows that her commander punished more than 25 per cent. of his crew. The offences of which our seamen are chiefly guilty are, it appears, drunkenness, insubordination, disobedience, theft and desertion. In one case, on board the *BOSCAWEN*, we are told that the punishment was inflicted for the use of obscene language on duty; and, in the *HORNET*, 84 lashes were given between two men for smuggling spirits into the ship. In six instances, "making false charges" brought the culprits to the gangway.—*Army and Navy Gazette*.

THE GREAT EASTERN.

The directors of the Great Ship Company had compiled a report that was to be presented to the shareholders at a public meeting to be held at the London Tavern on the 28th March. They congratulate the shareholders

that the trial trip to New-York was made at a loss of only £344 odd. As explained in their previous report, it was their intention to have despatched the ship on a second voyage to New-York on the 17th of October last, but, after considering the requirements of the Board of Trade for one voyage only, and the very imperfect state of the decks laid down by Mr. J. SCOTT RUSSELL under his contract, the directors, with the advice and concurrence of some of the largest proprietors, whom they invited to confer with them on the subject, abandoned that intention. They then reduced the staff and all other expenses as much as possible, and proceeded with the alterations and repairs. The bearing of the screw shaft was far the most serious task. By very skilful arrangements the necessity of removing the shaft from the ship was overcome, and the work has made such progress as to leave no reasonable doubt of its satisfactory completion, together with the feed pumps to the paddle-boilers, recommended by the Board of Trade, in the ensuing month. The main deck has been sheathed with $1\frac{1}{2}$ inch boards over a layer of tarred patent felt, thus forming a double deck. The directors believe that by these means the deck (hitherto a constant source of injury and annoyance) will be watertight, and the inconveniences thoroughly removed. The saloon and cargo decks have been caulked, and many other minor but important works are in progress. The question of future employment for the ship has received the most serious consideration of the directors. The want of public confidence in the ship has hitherto baffled the directors in their endeavors to obtain sufficient passengers and freight to remunerate the proprietors. They hope that the voyage to America has, in a great degree, removed the impediment. The passengers unanimously expressed their appreciation of the ease and comfort they enjoyed, and the total absence of sea-sickness, even to the most sensitive. Her excellence as a sea boat has been proved, and notwithstanding the inevitable disadvantages of an experimental voyage, the directors can now place full reliance on her steady speed. They believe that another successful voyage to America will establish the desired confidence, and that she might then be profitably employed in any trade where her great capacity and power can be developed. It is clear that by a computation of her speed now established, she would accomplish a voyage to India or Australia within forty days, upon a ration of consumption of coals far below that of other steamships. The directors have, therefore, resolved upon despatching the ship to America early in April, 1861, and they hope that the receipts from all sources will at least equal the expenditure, as experience has proved that the working expenses of this ship may be reduced to the ordinary charges of merchant steamers, which reduction the directors are determined to effect.

CHAMBERS OF COMMERCE AND BOARDS OF TRADE.

*Special Meeting of the New-York Chamber of Commerce, Friday,
April 19th, 1861.*

IN answer to a call issued by the President of the Chamber of Commerce, the meeting took place April 19th, PELATIAH PERIT, Esq., President, presided, and made the following address :

We are assembled to-day in special meeting, at the written request of many of our members, according to the requirements of our by-laws.

It has been the habit of this board not to intermeddle with the political questions which agitate the country, but there are occasions on which the ordinary rules of proceedings must give way to peculiar emergencies, and such an occasion has arisen to-day.

The nation has, in the course of events, sudden and unexpected, reached a crisis unprecedented in our history, when the safety of the government is threatened, and when the President of the United States, compelled by this alarming state of things, has called on the citizens to rally to the defence of the government: as an influential body of men in this commercial centre, we are bound to respond heartily to this call.

I trust, gentlemen, that in the discussions of this morning we shall forget all party distinctions, and with unanimity and warm hearts rally in support of a constitution and government the best in the world, and under which we have lived and prospered since the close of the revolutionary war. All which has been ours in times past, which constitutes our hope for times to come, is at stake. Under the specious name of secession, traitors have seized the public property, have attacked the national forts, and are now threatening the national capital. The prime of our young men are marching to its defence. Let us meet the crisis like patriots and men. There can be no neutrality now; we are either for the country or for its enemies.

Mr. OPDYKE rose, and stated that he held in his hand a series of resolutions which he would offer for the suffrage of the Chamber :

Whereas, Our country has, in the course of events, reached a crisis unprecedented in its past history, exposing it to extreme dangers, and involving the most momentous results; and *whereas*, the President of the United States has, by his proclamation, made known the dangers which threaten the stability of government, and called upon the people to rally in support of the constitution and laws; and,

Whereas, The merchants of New-York, represented in this Chamber, have a deep stake in the results which may flow from the present exposed state of national affairs, as well as a jealous regard for the honor of that flag under whose protection they have extended the commerce of the city to the remotest part of the world: Therefore,

Resolved, That this Chamber, alive to the perils which have been gathering around our cherished form of government and menacing its overthrow, has witnessed with lively satisfaction the determination of the President to maintain the constitution and vindicate the supremacy of government and law at every hazard. (Cheers.)

Resolved, That the so-called secession of some of the Southern States, having at last culminated in open war against the United States, the American people can no longer defer their decision between anarchy or despotism on the one side, and, on

the other, liberty, order and law, under the most benign government the world has ever known.

Resolved, That this Chamber, forgetful of past differences of political opinion among its members, will, with unanimity and patriotic ardor, support the government in this great crisis, and it hereby pledges its best efforts to sustain its credit and facilitate its financial operations. It also confidently appeals to all men of wealth to join in these efforts.

Resolved, That while deploring the advent of civil war, which has been precipitated on the country by the madness of the South, the Chamber is persuaded that policy and humanity alike demand that it should be met by the most prompt and energetic measures; and it accordingly recommends to government the instant adoption and prosecution of a policy so vigorous and resistless that it will crush out treason now and forever.

Resolved, That the proposition of Mr. JEFFERSON DAVIS to issue letters of marque to whomsoever may apply for them, emanating from no recognised government, is without the sanction of public law, but piratical in its tendencies, and, therefore, deserving the stern condemnation of the civilized world. It cannot result in the fitting out of regular privateers, but it may in infesting the ocean with piratical cruisers, armed with traitorous commissions, to despoil our commerce and that of all other maritime nations.

Resolved, That in view of this threatening evil, it is, in the opinion of this Chamber, the duty of our government to issue at once a proclamation warning all persons that privateering under the commissions proposed, will be dealt with as simple piracy. It owes this duty not merely to itself, but to other maritime nations, who have a right to demand that the United States government shall promptly discountenance every attempt within its borders to legalize piracy. It should, also, at the earliest moment, blockade every Southern port, so as to prevent the egress and ingress of such vessels.

Resolved, That the Secretary be directed to send copies of these resolutions to the Chamber of Commerce of other cities, inviting their coöperation in such measures as may be deemed most effective in strengthening the hands of the government in this emergency.

Resolved, That a copy of these resolutions, duly attested by the officers of the Chamber, be forwarded to the President of the United States.

Mr. OPDYKE, on presenting the above, remarked that they emanated from patriotic motives, and were addressed to such. The cherished flag of our country had been lowered at the demand of traitors, and it was the duty of this body to come promptly forward and tender its fullest aid to the government in this emergency. He hoped the resolutions would be adopted by acclamation.

Mr. JAMES GALLATIN said there was no excuse for secession in the election of Mr. LINCOLN, who was constitutionally elected. The seceding States had plunged the country into civil war, without any just pretext. The people of the South do not complain, but demagogues and traitors, usurping the government of the States, belie history to justify their conduct. His means and services, to the best of his ability, should be devoted to the maintenance and defence of his country, and he was happy to know that this was the sentiment of this great commercial community. (Applause.)

Mr. PHILLIPS thought the resolution should express itself in favor of a speedy blockade of the Southern ports, more emphatically than was expressed in the resolutions. He, therefore, offered a resolution in favor of the immediate blockade of every Southern port. Mr. PHILLIPS consented to withhold his resolution.

Mr. ROYAL PHELPS said the merchants had laid their case before the administration, and assurance had been received that immediate and efficient measures would be taken to blockade every Southern port.

(Loud applause, and cries of "Good.") Mr. ROYAL PHELPS said that steps which at first were not called treason had now become such. Although not authorized to speak for others, he believed he should speak the universal sentiment of the democratic merchants of this city, when he said he would support the government fully, earnestly, enthusiastically. (Loud applause.) The country is in the midst of a struggle for its existence, and the duty of every citizen, irrespective of party, is to uphold it.

S. B. CHITTENDEN said, the question was whether the government, to which eighteen millions of people are loyal, shall be overthrown by traitors. We must stand by the flag at whatever cost of blood or treasure; it must float forever over a people whom God planted, and whom he will defend. The government must understand that the people of this city are united for the Union, now and forever.

PROSPER M. WETMORE said, we did not at this time know any distinction of party. This was an unhappy day for our country. Civil war always brings suffering and disaster, but there is a bright side even to civil war—for a united nation of twenty million people sympathizes with us to-day, and such unanimity presented a sublime spectacle to the world. The merchants of New-York, in 1765, united for liberty, and struck the first blow that gave us freedom. It had been common in writers to decry the motives of commercial men; but see what a scene was presented to-day—the merchants of this great commercial metropolis meeting and pledging their character and all they have for their country. (Applause.)

Mr. BOORMAN thought the fate of the Federal party should be a lesson to those who would not stand by the government when beset by a rebellious war in its own dominions.

Mr. BLUNT said that the constitution had been trampled under foot. The rebels had stolen all they could on land, and now proposed to steal by water. We had traitors among us, but they have been marked, and would be weeded out. He had gotten rid of one to-day in short metre.

Mr. LARNED, who had just returned from Washington, addressed the Chamber regarding the anxiety about the Capital. When he passed through Baltimore, he was assured there would be no mob interference with the troops.

Ex-Governor KING, WM. E. DODGE and ELLIOT C. COWDEN addressed the Chamber, urging action on the part of merchants and captains to sustain the government.

Special Meeting of the New-York Chamber of Commerce, April 25, 1861.

A special meeting of the Chamber of Commerce was held on Thursday, April 25, the President, PELATIAH PERIT, in the chair. The Secretary, Mr. HOMANS, read the call, which was to take into consideration the recent act of the legislature in reference to the Committee of Arbitration, and the amendment of the By-Laws in relation thereto. The act was then read, viz. :

CHAPTER 251.

An act to amend an act entitled "An act to remove doubts concerning the Corporation of the Chamber of Commerce, and to confirm the rights and privileges thereof," passed April thirteen, seventeen hundred and eighty-four. Passed April 15, 1861, three-fifths being present.

*The people of the State of New-York, represented in Senate and Assembly, do enact as follows:—*SECTION 1. The Chamber of Commerce of the State of New-York shall

have power to elect, by ballot, in conformity with the by-laws adopted by the said Chamber, a committee, to be known and styled the "Arbitration Committee of the Chamber of Commerce," and shall have power also to appoint a Committee of Appeal; and the duly elected members of the said Chamber, and all persons claiming by, through or under them, may, under the limitations, and subject to the restrictions imposed by the provisions of the statutes of the State of New-York relative to arbitration, submit to the decision of the Committees of Arbitration and Appeal, as the same may be constituted by the said Chamber, any controversy existing between them which might be the subject of an action, and may agree that a final judgment, in a court of record, to be by them designated, shall be rendered on any award made pursuant to such submission.

SECTION 2. The Committees of Arbitration and Appeal, elected or appointed as aforesaid, shall possess the same powers and be subject to the same duties and disabilities as appertain to arbitrators by the laws of the State of New-York, and awards made by them must be made, and may be enforced, as therein and thereby directed; and all the provisions contained in title fourteen, part third, chapter eight of the Revised Statutes of the State of New-York, and all acts amendatory or in substitution thereof, shall apply to proceedings had before the said Committees of Arbitration and Appeal, as if specially incorporated herein; except that the judgment, to be rendered in the manner therein directed, on any award made by them as aforesaid, that is to say, by the Committee of Arbitration, no appeal from its action being taken by either party to the controversy, or by the confirmatory action of the Committee of Appeal, shall not be subject to be removed, reversed, modified or appealed from by the parties interested in such submission as aforesaid.

SECTION 3. This act shall take effect immediately.

Mr. P. M. WETMORE offered the following resolutions, which were adopted:

Resolved, That this Chamber of Commerce of the State of New-York hereby accepts and binds itself to act under the law of the legislature of the State of New-York in relation to this Chamber. [Passed April 18, 1861.]

Resolved, That the thanks of the Chamber are due and are hereby tendered to the Hon. B. F. MANIERRE, of the Senate, and other members of that body, and to the Hon. Speaker, Mr. LITTLEJOHN, Hon. Messrs. LUCIUS ROBINSON, BENJ. F. CAMP, JOHN HARDY, NATHAN COMSTOCK and others, of the Assembly, for their active personal exertions in successfully urging the passage of the bill to amend the charter of this Chamber through the legislature at its recent session.

Subsequently Mr. WETMORE offered certain amendments to the by-laws, growing out of the statute passed, and which were laid over for consideration at the next meeting.

By unanimous consent Mr. DEHON, Treasurer of the Committee appointed to raise subscriptions to uphold the government, stated that he was authorized by the committee to say that they had procured large subscriptions, the details of which and the disbursements they would submit at the next meeting of the Chamber. The amount was over \$100,000. He would say, however, that their general plan had been to advance money only to regiments. There were, however, exceptions, and they had taken from the regiments assignments of their claims upon the State, and had dealt with each according to the necessities of the case, giving first to those regiments who were ready the first to go forward. He stated that with the exception of two members of the committee, they had all been included in the committee of citizens, and the disbursements of the Common Council had been referred to that committee. In view of this fact, he recommended that the committee of the Chamber of Commerce be merged into the citizens' committee. The motion was carried.

On motion of Mr. CONKLING, the committee were authorized to pay over the balance in their hands to the citizens' committee.

The Chamber then adjourned.

*Annual Meeting of the New-York Chamber of Commerce, Thursday,
May 2d, 1861.*

The regular monthly meeting of the Chamber of Commerce was held at their rooms, corner William and Cedar streets, Thursday, May 2d, 1861, the President, PELATIAH PERIT, in the chair. It was also the annual meeting of the Chamber, and the first business in order was the election of officers for the ensuing year. The choice of a president first claiming the attention of the members,

ROYAL PHELPS rose and said : It affords me great pleasure to offer for your suffrages our actual president for re-election. I hope, indeed I have no doubt, that the vote for him will be unanimous, as you all know a unanimous vote is required. I think there are more than ordinary reasons why our president should remain in office during our present political troubles ; and the only possible objection I can imagine any one could have is, that by his election all those officers under him might also expect to be re-elected. I hope that any member who entertains any such idea will dispose of it so far as the first officer of the Chamber is concerned, and that we may elect the right man in the right place. I propose, therefore, the re-election of Mr. PELATIAH PERIT as president for another year.

The motion was unanimously carried, and so Mr. PERIT was *viva voce* chosen president for the ensuing year, without a dissenting voice.

Mr. PERIT said : Gentlemen, I thank you for the honor you have just conferred on me. It had been my intention and my sincere desire to withdraw from this office, partly from considerations of health ; but in the actual circumstances of the country I think every man is bound to remain in the place properly assigned to him, and properly occupied by him, under any circumstances, as far as he has the ability to do it. The attitude of the Chamber of Commerce of New-York is such that it exerts on those matters which come properly within its province a very powerful influence throughout the whole United States. We have had many evidences of this. Our nation is now undergoing a trial more severe than has ever before happened perhaps in the history of nations, in which the faculties and powers of every man are needed to support the government. The Chamber of Commerce of New-York, representing the commercial community of this great city, has immense power and influence, and the Chamber is bound to exert it faithfully and consistently in support of the government. And there are modes in which we can be especially useful to the government. New-York is now the headquarters of finance in this country. The members of this Chamber are scattered widely through this community, and especially in those places where money is largely disposed of. Their influence can materially aid the government in the negotiation of loans, and a loan is now pending in which that influence will be felt. Every one here knows that in any large amount which the City or State of New-York, or other States, will be borrowing, there will be a heavy pressure of stock in the market, and it is very important that the credit of the government be fully sustained, and all its loans taken promptly, and taken on such terms as will be creditable and honorable to the government. The government are well aware of the value of our influence, and, during our proceedings this afternoon, you will receive an acknowledgment on the part of the Secretary of State of the resolutions

which were transmitted from this board, when we held a meeting specially for that object, which is important evidence that the government is gratified, and feel very much encouraged by the resolutions adopted here, and the measures which followed those resolutions. I trust, therefore, that whilst there will undoubtedly be a great deal of work to do during the year, everybody here will do all in their power to assist the government.

The other officers were also unanimously re-elected, so that the officers for the ensuing year remain the same, as follows :

The First Vice-President, ROYAL PHELPS, and Second Vice-President, A. A. Low, were, by unanimous consent, re-nominated for re-election and were unanimously re-elected. J. SMITH HOMANS was unanimously re-elected Secretary and Mr. E. C. BOGERT, Treasurer.

The president said the next business in order would be the election of a Chairman of the Committee on Arbitration, and suggested the name of GEORGE OPDYKE. Some discussion ensued between Messrs. WETMORE, OPDYKE and CONKLING, relative to the proposed amendments to the by-laws of the Chamber, by which it is provided that a member of the Committee of Arbitration shall be elected every three months, instead of every month, as at present.

The following amendments of the by-laws proposed at the last meeting were this day adopted :

Strike out Articles 12, 13 and 14, and insert in their stead the following :

ARTICLE 12.

The Chamber shall elect a standing committee, to be styled a Committee of Arbitration, to whom all mercantile disputes which may arise between members of the Chamber, or between parties claiming by, through or under them, may be referred by mutual agreement. Said committee shall consist of five members, one of whom shall be elected as the chairman of the committee, and shall hold office one year; the other members of the committee shall, in the first instance, be elected to hold office for the following terms, viz.: one for three months, one for six months, one for nine months, one for twelve months. When their terms of service shall expire respectively, their places shall be filled by electing a member of the committee to hold office twelve months.

The Chamber shall also appoint a standing committee, to be styled the "Committee of Appeal," to which an appeal may be taken from the decision of the Committee of Arbitration, provided notice of appeal in writing shall be served on the chairman of the Committee of Arbitration and on the opposite party within ten days after the award in the case shall have been made, and notice thereof shall have been served on the parties. The Committee of Appeal shall consist of the president, the first and second vice-presidents, and the treasurer of the Chamber, together with the Chairman of the Committee of Arbitration.

ARTICLE 13.

The Committee of Arbitration and Appeal respectively shall have power to appoint a clerk, to prescribe his duties and emoluments, and to adopt such rules to govern proceedings before them as they shall deem necessary or proper from time to time; they shall keep minutes of their proceedings and decisions, which shall be open to the inspection of the Chamber.

In case of a vacancy occurring in either of the Committees of Arbitration or Appeal, the place so vacant shall be filled at the next meeting of the Chamber.

ARTICLE 14.

It shall be the duty of the members of the Committee of Arbitration and Appeal respectively to meet, hear and determine, with reasonable promptitude, all cases

which shall be duly submitted to them; and any member of either of said committees who, in the judgment of a majority of his associates, shall neglect or refuse so to perform his duty, shall thereby vacate his office, and, upon the fact being officially certified to the Chamber, a member shall be elected in his stead.

The following gentlemen were elected members of the Committee on Arbitration: GEORGE OPDYKE, ROBERT B. MINTURN, WALTER S. GRIFFITH, JONATHAN STURGES and SAMUEL D. BABCOCK.

MOSES H. GRINNELL, BENJAMIN R. WINTHROP and ARCHIBALD G. KING were chosen, on behalf of the Chamber, trustees of the Institution for the Savings of Merchants' Clerks.

The following gentlemen were elected as the Executive Committee for the present year: CHARLES H. MARSHALL, JAMES D. P. OGDEN, HENRY A. SMYTHE, AUGUSTUS C. RICHARDS, HENRY CHAUNCEY, WILLIAM E. DODGE, SHEPPARD GANDY, JAMES GALLATIN, BENJAMIN R. WINTHROP, NATHANIEL L. MCCREADY.

Mr. PERIT, at this stage, announced the reception of the following letter of acknowledgment from Mr. SEWARD, Secretary of State, in reply to the resolutions adopted April 19th, which was read by the secretary:

DEPARTMENT OF STATE, WASHINGTON, 26th April, 1861.

TO PELATIAH PERIT, Esq., Chairman of the Chamber of Commerce, New-York:

SIR,—The resolutions of the Chamber of Commerce concerning the present attitude of public affairs, although sent forward so early as the 20th inst., have, in consequence of postal obstructions, only just now reached this department. I have lost no time in submitting them to the President of the United States. He directs me to assure the Chamber of Commerce that he has read the resolutions with the highest appreciation of the loyalty, patriotism and liberality of that body; and to the end that they may find a just place in the history of this, the most important crisis, save one, that our country has been called to meet, I have deposited the resolutions in the archives of the government.

I have the honor to be, with the highest respect, your obedient servant,
WILLIAM H. SEWARD.

MESSRS. C. A. DAVIS, C. H. MARSHALL, H. K. BOGERT, WILLIAM BARTON and J. K. MYERS were elected as the Committee on the Mercantile Library.

The treasurer presented his annual report, showing that the receipts during the past year had been \$6,981 55, and the disbursements, \$6,654 49, leaving a balance of \$327 06 in bank. On motion of ROYAL PHELPS the thanks of the Chamber were tendered to the treasurer for promptly presenting the annual report, this being the first time, he said, in fourteen years, that the treasurer's financial statement had been received at the annual meeting.

MESSRS. BENJAMIN F. BUTLER, MANSFIELD LOVELL, PETER MARIE and LUKE T. MERRILL, who had been nominated at the last meeting, were then elected members of the Chamber.

Mr. THEODORE DEHON submitted his report as treasurer of the receipts of the Finance Committee, appointed by the Chamber of Commerce on the 19th of April, to receive subscriptions of merchants for the outfit of volunteers. The receipts were \$115,853, and the disbursements, \$92,883, leaving a balance of \$22,970, which was paid over to the Union Defence Committee, into which the committee of the Chamber of Commerce has been merged.

PHILADELPHIA CORN EXCHANGE ASSOCIATION.

Preamble and Resolutions adopted April 15, 1861.

The following preamble and resolutions were read and adopted by a unanimous vote:

Whereas, Armed rebellion has raised its hand against the government of the United States, and is now engaged in the perpetration of infamous outrages upon the honor, integrity and safety of our beloved country; and,

Whereas, It is the duty of all true men, in a crisis like the present, to express their devotion to the sacred cause of their country and their firm determination never to abandon her to her enemies; therefore,

Resolved, That the Corn Exchange Association, in the manifestation of their unreserved and entire sympathy with the administration in this trying hour, and in token of their earnest desire to do all that men may do in behalf of their country, do now instruct their Committee of Superintendence to purchase immediately, and cause to be extended, the insulted but still beloved flag of the United States in front of their building before sunset, and to keep it flying there under all circumstances.

In half an hour after the adoption of the above the flag was thrown, to the breeze.

PHILADELPHIA BOARD OF TRADE.

Preamble and Resolutions adopted April 15, 1861.

The following preamble and resolutions were, on motion of Mr. MERRICK, unanimously adopted by a meeting of the Board of Trade on Monday evening:

Whereas, In the present critical condition of political affairs, it becomes incumbent on all loyal citizens, of every class, publicly to express their fealty to the national government, and their unalterable devotion to the Constitution and the Union;

And whereas, such expression is peculiarly appropriate at this time from the mercantile and industrial classes of this community, whose interests have been cherished and extended under the protection of the flag of our country; therefore,

Resolved, That the Board of Trade of Philadelphia take this opportunity of declaring the ardent and unwavering attachment of its members, and of the commercial community of this city generally to the Union, the Constitution and the flag of the United States.

Resolved, That the Association of the Board of Trade, and the merchants and manufacturers of Philadelphia, be invited to assemble at these rooms at 12 o'clock noon, on Wednesday, the 17th instant, to respond to the above resolutions.

Resolved, That the Secretary be instructed to raise the United States flag over the building and rooms of the Board.

THE BOSTON BOARD OF TRADE.

Special Meeting of the Government of the Boston Board of Trade, Monday, April 29, 1861.

The President stated that the object of this meeting was to consider the present aspect of affairs as relates to our commerce, which is exposed

to depredation from the action of the "Confederate States," so called; and suggested that some measures of protection were absolutely necessary on the part of the Federal government. When he had concluded, Mr. CHARLES J. MORRILL moved the following resolutions, which, after spirited remarks by Messrs. CHARLES G. NAZRO, JOSEPH S. ROPES, M. D. ROSS, CHARLES O. WHITMORE, and JOHN COLLAMORE, were unanimously adopted.

Resolved, That a due regard to the protection of maritime commerce demands an immediate increase in the available naval force of the United States, by the purchase by the Federal government of ten or more first-class clipper ships and ocean steamers, to be equipped, armed and commissioned forthwith, and employed on our coast, especially for the protection of merchant vessels from attacks of privateers or piratical cruisers, and to co-operate with the blockading squadron.

Resolved, That the President and Secretary be requested to prepare, and transmit to the President of the United States a memorial embracing a copy of the foregoing resolution, and asking the immediate action of the government in accordance therewith.

Resolved, That the Secretary be requested to transmit a copy of the proceedings of this meeting to the Chamber of Commerce of New-York, and the Board of Trade of Philadelphia, and solicit their co-operation in the object.

BOSTON BOARD OF TRADE.

Monthly Meeting, May 6, 1861.—A report of disasters to Boston vessels and vessels employed in the trade of Boston, for the month of April, was presented and ordered on file for the use of the committee on inquiry into the causes of shipwreck. Mr. JOHN T. HEARD presented a report, which was accepted.

The "Committee on the Crisis" would respectfully report, that they have held frequent meetings since their appointment. General subjects have engaged their attention, but their only action has been that which has resulted in the formation of a State organization for the raising and care of a soldier's fund. That organization acts independently of the government of the Board of Trade.

The committee were requested to continue their services, and to act at discretion upon whatever questions may come to their notice. A letter was read from ROBERT B. FORBES, accompanied by twelve charts of various distant coasts, according to the surveys of Captain RINGGOLD and Lieut. ROGERS, U. S. N., for the use of the members of this Board, and for the information of the public, and expressing the hope that the Board will take measures to procure copies of these charts from Washington, for circulation among persons interested in navigation and commerce. Read and ordered on file.

The President and Secretary reported, that in accordance with the vote at the special meeting, they had transmitted a memorial to the President of the United States on the subject of employing clipper ships and ocean steamers to protect vessels of our flag returning from foreign voyages, in ignorance of the unhappy condition of our public affairs; to protect the California steamers and other vessels exposed to capture under the proclamation of JEFFERSON DAVIS, and to give aid to the blockading squadron.

The preamble and resolutions of the New-York Chamber of Commerce, adopted by that body "unanimously and by acclamation," relating to the present crisis, were read; but this Board have acted upon the same matter. Ordered that the Secretary reply thereto, expressing our entire approval of the sentiments embraced therein.

Communication from SAMUEL H. DALL, of Bangor, on the evils of the present system of promissory notes, payable to the order of the makers, and their sale by brokers, was discussed by Messrs. ROPES, BOND and the President, and referred to the Secretary.

JOURNAL OF MERCANTILE LAW.

1. ILLEGAL COASTING TRADE. 2. FOREIGN OWNERS OF VESSELS. 3. ABANDONMENT OF SHIP—NOTICE TO UNDERWRITERS. 4. TRADE MARKS. 5. LIABILITY FOR NEGLIGENCE. 6. DUTY ON HIDE. 7. ASSIGNMENT. 8. SUIT ON BOND.

ILLEGAL COASTING TRADE.

The United States *vs.* The Schooner *RESTLESS*.

THIS vessel was seized by the collector of this port on her arrival from the Island of Cuba, for an alleged violation of the act of 1793, "for enrolling and receiving ships or vessels to be employed in the coasting trade, and for regulating the same." The facts were reported under oath to the Hon. S. P. CHASE, Secretary of the Treasury. That functionary has decided "to remit all the right and claim and demand of the United States, and of all others to the said forfeiture, on the payment of all the costs, charges and expenses incurred in the case, it appearing to my satisfaction that the forfeiture was incurred without wilful negligence." The case of the cargo of the *RESTLESS* has not been passed upon, but a similar decision may be expected.

The United States vs. 5,000 grain bags.—This was a similar proceeding against an importation by the Liverpool, New-York and Philadelphia steamship line, and which had been forfeited for a violation of an act passed in March, 1799, to regulate the collection of duties. The Hon. Secretary of the Treasury made a similar order to that in the case of the *RESTLESS* for the release of the goods on the payment of all the costs.

FOREIGN OWNERS OF VESSELS—WHEN THERE IS CREDIT THERE IS NO LIEN FOR NECESSARY SUPPLIES.

Before the United States District Court, N. Y.

The vessel was arrested on a claim of a blacksmith to the amount of two hundred and sixty-seven dollars and forty-two cents, for materials and labor supplied her in this city for her repair. It was admitted that she was a foreign vessel, and came into this port disabled, and requiring a large outlay in iron work for the repairs, and that the supplies and labor furnished at the libellant's shop, and put upon her, were necessary to enable her to complete her voyage to her home port. The principal question raised was to the jurisdiction of the court over the cause of action, upon the ground that libellant required no lien on the vessel for his demand; her owner, at the time, possessing funds and credit in this port amply sufficient to meet the demand, of which the libellant had notice, or ready and certain means of informing himself.

BETTS, J.—This point is vital to the action, and precludes the necessity of considering the case upon its general merits. It is believed that up to December, 1856, it was recognised in the books and adopted in maritime courts in this country and abroad, as a fixed principle of maritime

law, that a vessel in a port foreign to her owners, and found in want of supplies or repairs to render her fit for navigation, and obtaining them on credit on the application of her master, the owners would thereby become bound for the debt, and the vessel be impliedly hypothecated therefor, and subject to arrest *in rem* in the maritime courts for its satisfaction. The cardinal fact open to inquiry in fixing the liability of the vessel was, whether the supplies and materials were necessary for her in her then condition; and probably in connection with that question there might be materiality in ascertaining whether the credit was *bona fide* obtained by the master, or if the creditors set up a lien with knowledge that the master had funds in his hands or at his command sufficient to satisfy the credit when the debt was incurred. The Supreme Court, in *PRATT vs. REED*, denied that a lien attached for necessities supplied a vessel in a foreign port at the request of her master, unless, in addition to the proof of the necessity of the vessel, there is also proof to show that at the time of procuring the supplies there was a necessity for a credit upon the vessel. The court declares this proof as essential as that of the necessity of the article itself. The doctrine thus declared seems unequivocal and positive. It is authoritative and final in this court. Since this determination the rule has been implicitly followed in this court, and it fully covers and must govern the present case. The testimony is clear that the owners of this vessel had, at the time she was repaired in this port, ample credit and actual funds in the hands of Mr. BULLEY, their agent here, and that the libellant had implied notice of that fact through his personal and business intercourse with that agent, and could have had explicit assurance of the fact, if inquiry had been made of the agent or master of the vessel. The law accordingly excludes the jurisdiction of the court over the subject matter of the action. Libel dismissed.

ABANDONMENT OF SHIP AND CARGO WHEN JUSTIFIED—NOTICE OF TO UNDERWRITERS.

The schooner *ORB*, having encountered severe gales and continued rough weather in the neighborhood of Cape Horn, was so much damaged as to be obliged to put back in distress to some port of safety. Under these circumstances she arrived in the port of Rio in October, 1851. After a survey held, she was condemned as wholly unseaworthy, not worth repairing, and recommended to be sold. The cargo, an assorted one, containing fruits, fish, oysters and many other perishable articles, was much deteriorated, and, on a survey, was recommended to be sold. No shipment, in whole or in part, could be had to the place of destination. Held, that mere notice of abandonment of ship and cargo to the underwriters, without actual abandonment, amounts to nothing. That this was a proper case for abandonment of both vessel and cargo. Where a ship puts into a port in a damaged condition, and the cargo is surveyed and recommended to be sold, it being in such a position that it is out of the power of the assured or underwriter to procure its arrival at the port of destination, the case is a proper one for an abandonment. After the abandonment, is complete the master is the agent of the underwriters, and bound to use diligence, skill and care towards the interest of all con-

17° 56' 18" east of Greenwich, or 3 miles westward of the longitude in the Admiralty charts.

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5. *Fixed and Flashing Light at Cartaya*.—On and after the 1st day of April, 1861, a light will be exhibited from a light-house recently erected at a place called Rompido de Cartaya, on the left bank, at the entrance of the river of Las Piedras, on the southwest coast of Andalusia. The light is a *fixed white* light, varied by a flash every four minutes. It is placed at an elevation of 79 feet above the mean level of the sea, and should be seen in clear weather, from the deck of a ship, at the distance of 14 miles. The illuminating apparatus is dioptric, or by lenses, of the third order. The tower is circular, 36 feet high, and of a yellow color; it is surmounted by a lantern painted green. It stands in the centre of the southern face of the keeper's dwelling, which latter is square. The position of the tower is in lat. 37° 11' 5" N., long. 6° 58' 25" west of Greenwich.

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7. *Green Lights at Cristina Island*.—On and after the 1st day of March, 1861, two new lights would be exhibited from La Punta, or the point to the south of the town of Isla Cristina, for crossing the bar at that place. The lights are *fixed green* lights. The northern one is placed at an elevation of 26 feet, and the southern one 16 feet above the mean level of the sea, and should be seen in clear weather, from the deck of a ship, at the distance of 7 miles. Each light is placed on a column to the eastward of the light-keeper's dwelling. The position of the lights is in lat. 37° 10' 45" N., long. 7° 13' 45" west of Greenwich, and one mile from the bar.

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9. *Red Light on the Sénéquet Rock.*—On and after the 20th day of February, 1861, a light will be exhibited on the tower recently built on the Sénéquet Rock, in the Déroute Passage, about 6 miles north of Regneville, on the west coast of the Department of La Manche. The light will be a *fixed red* light, placed at an elevation of 55 feet above high water, and should be visible from the deck of a ship, in clear weather, at a distance of 10 miles. The tower stands in lat. $49^{\circ} 5' 32''$ N., long. $1^{\circ} 39' 49''$ west of Greenwich.

10. *West Coast—Change in the Biarritz Light.*—The Biarritz Light, which now revolves once every 30 seconds, will be changed to a light revolving every 20 seconds, showing alternately a *white* and *red* face, which should be visible in ordinary weather at a distance of 22 miles. Biarritz light tower stands about $2\frac{1}{4}$ miles southwest of the entrance of the River Adour, in the southeastern part of the Bay of Biscay, lat. $43^{\circ} 29' 38''$ N., long. $1^{\circ} 33' 19''$ west of Greenwich.

11. *Lights at the Port of Cette.*—On and after the 15th day of February, 1861, the following changes will take place in the position of the lights of the port of Cette, on the south coast of France, in the Mediterranean: 1. The great fixed light of the port will be changed to the tower recently built in the centre of St. Louis mole-head. It will be placed at a height of 105 feet above the mean level of the sea, and should be visible from the deck of a ship, in an ordinary state of the atmosphere, at a distance of 15 miles. The tower, which is 88 feet high, stands in lat. $43^{\circ} 23' 50''$ N., long. $3^{\circ} 42' 1''$ east of Greenwich. 2. The two small lights vertical on the sea-mark near Fort Richelieu will be changed to the southwest angle of that fort, at about 840 yards W. by N. $\frac{1}{4}$ N. of the Mole-Head Light, so as to form with it leading lights for the eastern entrance of the harbor. These lights, which will be elevated 272 feet above the level of the sea, will be visible at a distance of 4 miles in ordinary weather; but they blend and appear as one light when beyond the distance of one mile and a half. They will be replaced at a later period by lights which will be established, one on the extremity of the Frontignan Jetty, the other on the northeast pier head of the detached briselame or breakwater which shelters the entrance of the port. All bearings are magnetic. Variation $17^{\circ} 35'$ W. in 1861.

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east shore of the mouth of the River Odiel, in lieu of those now in use. The lights are *fixed white* lights. The northern one is placed at an elevation of $27\frac{1}{2}$ feet, and the southern one $16\frac{1}{2}$ feet above the mean level of the sea, and should be seen in clear weather, from the deck of a ship, at a distance of 8 miles. Each light is placed on a brown column to the westward of the light-keeper's dwelling. The position of the lights is in lat. $37^{\circ} 7' 30''$ N., long. $6^{\circ} 47' 25''$ west of Greenwich, and three-quarters of a mile from the bar.

9. *Red Light on the Sénéquet Rock.*—On and after the 20th day of February, 1861, a light will be exhibited on the tower recently built on the Sénéquet Rock, in the Déroute Passage, about 6 miles north of Regneville, on the west coast of the Department of La Manche. The light will be a *fixed red* light, placed at an elevation of 55 feet above high water, and should be visible from the deck of a ship, in clear weather, at a distance of 10 miles. The tower stands in lat. $49^{\circ} 5' 32''$ N., long. $1^{\circ} 39' 49''$ west of Greenwich.

10. *West Coast—Change in the Biarritz Light.*—The Biarritz Light, which now revolves once every 30 seconds, will be changed to a light revolving every 20 seconds, showing alternately a *white* and *red* face, which should be visible in ordinary weather at a distance of 22 miles. Biarritz light tower stands about $2\frac{1}{2}$ miles southwest of the entrance of the River Adour, in the southeastern part of the Bay of Biscay, lat. $43^{\circ} 29' 38''$ N., long. $1^{\circ} 33' 19''$ west of Greenwich.

11. *Lights at the Port of Cette.*—On and after the 15th day of February, 1861, the following changes will take place in the position of the lights of the port of Cette, on the south coast of France, in the Mediterranean : 1. The great fixed light of the port will be changed to the tower recently built in the centre of St. Louis mole-head. It will be placed at a height of 105 feet above the mean level of the sea, and should be visible from the deck of a ship, in an ordinary state of the atmosphere, at a distance of 15 miles. The tower, which is 88 feet high, stands in lat. $43^{\circ} 23' 50''$ N., long. $3^{\circ} 42' 1''$ east of Greenwich. 2. The two small lights vertical on the sea-mark near Fort Richelieu will be changed to the southwest angle of that fort, at about 840 yards W. by N. $\frac{1}{2}$ N. of the Mole-Head Light, so as to form with it leading lights for the eastern entrance of the harbor. These lights, which will be elevated 272 feet above the level of the sea, will be visible at a distance of 4 miles in ordinary weather; but they blend and appear as one light when beyond the distance of one mile and a half. They will be replaced at a later period by lights which will be established, one on the extremity of the Frontignan Jetty, the other on the northeast pier head of the detached briselame or breakwater which shelters the entrance of the port. All bearings are magnetic. Variation $17^{\circ} 35'$ W. in 1861.

BALTIC—GULF OF FINLAND.—12. *Lights at Kronstat.*—The following alterations will be made in the lights at Kronstat, prior to the opening of the navigation in the spring of 1861 : The three fixed lights in the centre of the fort of Emperor PAUL I., or Risbank Fort, will be discontinued. The eastern light on Nicholas Battery, at Kronslot, which is now 45 feet above the mean level of the sea, will be raised 58 feet above the same level, and should be visible from the deck of a ship, in clear weather, at a

plished in an hour and a half, including the passage of five locks, and the Islington Tunnel, half a mile long. The *PIONEER*, an ordinary fly-boat, 75 feet long by 7 feet extreme breadth, 25 tons burden, and drawing $2\frac{1}{2}$ feet of water, with an engine of six horse power, was the boat employed towing another fly-boat which was laden with a general cargo to go to Wolverhampton. The two boats were able to go through the locks at once, floating side by side, and thus saving much delay. It is stated that the *PIONEER*, when tried at Manchester, proved able to draw six loaded barges at once, with a total burden of no less than 300 tons. Four miles an hour, allowing for the locks and other hindrances, will be the average rate of steam performance, instead of two miles an hour, the usual speed obtained by horse-towing. The steamboat has stowage room for $2\frac{1}{2}$ tons of coal, which will carry her from London to Birmingham and half-way back, superseding the expensive relays of horses and drivers requisite for so long a journey. This water locomotive is estimated to be nearly 30 per cent. cheaper than railway carriage, and the canals are not done with yet.

AMERICAN STREET RAILWAYS.

The American street cars run from well-known terminal dépôts, at certain well-known intervals of time, and never at any other. They do not run off brutally, ten together, like a pack of hungry curs, to fight and wrangle for the same twenty passengers, but are orderly as planets. They run at graduated hours, and with proper intervals between each other; each horse, each carriage, each driver, each conductor perform so many journeys in the day. The horses are never jaded, and the carriage, full or empty, never lingers at crossings, side streets or public houses. You never have to wait twenty minutes for a conveyance. I have already said that these street rail-roads require no turn-tables or other mechanical appliance. The reason of this is, the ingenious construction of the carriages, which are provided on either hand with iron holders for the traces, and with boxes to receive the pole; thus, when the driver gets, say to Harlem, and wants, after resting his prescribed quarter of an hour, to return to the city, the groom of the terminus stables merely unfasten the horses (Americans, on account of the heat, use very little harness) from the front, and attach the animals in two minutes to what was just now the rear. There is no bawling of scurrilous conductors in American streets. Every one can read the names of places, in large legible letters, on the street cars; if a stranger wants to inquire his way, it is worth ten cents to leap on the steps, ride for a few minutes and learn the road from the conductor; who, if he sees him to be an Englishman, (and they always find an Englishman out,) will be delighted to have a few minutes' talk with him.—*Dickens' "All the Year Round."*

RAIL-ROAD ACCIDENTS DURING THE YEAR 1860.

The following table shows the number of rail-road accidents which have occurred in the United States during the year just closed, which were attended with loss of life and injury to persons, together with the number

of killed and wounded, compared with the number of like accidents in 1859 :

Months.	1860.			1859.		
	Acci- dents.	Killed.	Wounded.	Acci- dents.	Killed.	Wound- ed.
January,.....	11	..	5	7	..	4
February,.....	10	..	3	9	..	6
March,.....	1	..	..	9	..	8
April,.....	5	..	4	6	..	8
May,.....	5	..	5	5	..	4
June,.....	4	..	4	10	..	47
July,.....	5	..	5	9	..	5
August,.....	6	..	5	3	..	16
September,.....	7	..	8	6	..	4
October,.....	8	..	6	6	..	10
November,.....	4	..	7	5	..	15
December,.....	8	..	5	4	..	2
Total,.....	74	..	57	79	..	129

The above figures do not include individual accidents, caused by the carelessness of travellers themselves, or deaths or injuries resulting from the reckless conduct of persons in crossing or standing upon rail-road tracks where trains are in motion.

The following additional table shows the number of accidents, and the number of persons killed and injured by accidents to rail-road trains during the last eight years :

	Accidents.	Killed.	Wounded.
1853,	138	234	496
1854,	193	186	589
1855,	142	116	539
1856,	143	195	629
1857,	126	130	530
1858,	82	119	417
1859,	79	129	411
1860,	74	57	315
Total in eight years,	977	1,166	3,926

Railway Review.

SUNBURY AND ERIE RAIL-ROAD.

The name of this company has been changed, by the act of the State legislature, to that of the Philadelphia and Erie Rail-Road, by which name it will hereafter be known. The same act provides for a release of the State first mortgage on this road, and the issue of \$5,000,000 first mortgage bonds, or £1,000,000 sterling bonds, payable in twenty years from date, at six per cent. interest; the proceeds of these first mortgage bonds to be used in completing and equipping the road and paying the debts of the company contracted for that purpose. This issue to be a first lien on the whole road, except as to that part of the road from Sunbury to Williamsport, on which a mortgage for \$1,000,000 already exists, and which takes the precedence of the mortgage now authorized on that section. The State claim of \$3,500,000 is then to be secured by a second mortgage of \$4,000,000, in forty bonds of \$100,000 each, which are to be held as collateral security for the payment of the State claim.

STATISTICS OF TRADE AND COMMERCE.

COTTON IN ENGLAND.

THE following statistical table exhibits the increase and decrease of the cotton crop in the several countries named, throughout a series of years, as indicated by the imports into Great Britain. The returns for 1860 have just been received in the *London Economist*. The other years are from authoritative sources, but mostly from that reliable journal :

YEARS.	United States. lbs.	West Indies. lbs.	Brazil. lbs.	East Indies. lbs.	Egypt. lbs.
1791..	189,816 ..	12,000,000 ..	20,000,000 ..	..... ..	....
1800..	17,789,808 ..	17,000,000 ..	24,000,000 ..	8,000,000 ..	....
1821..	124,893,405 ..	9,000,000 ..	28,000,000 ..	50,000,000 ..	**5,000,000
1832..	322,215,122 ..	1,708,764 ..	20,109,560 ..	\$5,178,625 ..	**9,113,890
1838..	595,952,297 ..	928,425 ..	24,464,505 ..	\$40,230,064 ..	not given.
1840..	742,941,061 ..	427,529 ..	14,779,171 ..	57,600,000 ..	**8,324,937
1845..	872,905,996 ..	*1,894,447 ..	20,157,633 ..	92,800,000 ..	32,537,600
1848..	814,274,431 ..	†8,155,600 ..	†40,080,400 ..	91,004,800 ..	**7,231,861
1856..	1,351,431,827 ..	*462,784 ..	21,830,704 ..	180,496,624 ..	34,399,008
1857..	1,048,282,472 ..	*1,443,568 ..	29,910,832 ..	250,388,144 ..	24,532,257
1858..	1,118,624,012 ..	.... ..	18,617,872 ..	138,253,360 ..	38,232,320
1859..	961,707,264 ..	.... ..	22,478,960 ..	192,330,880 ..	37,667,056
1860..	1,115,890,608 ..	.... ..	17,286,864 ..	204,141,168 ..	43,945,064

THE NEW ROUTE FOR COTTON.

Twenty car loads a day on the New-York Central.—"For some days there has been sent East, from Buffalo to Boston, on an average, twenty car loads of cotton per day, or eighteen thousand bales in that time, and still it comes. Thirty bales, or about seven tons and a half weight, is readily put in each car. This is the compressed cotton, as formerly only about twenty or twenty-three bales was all that could be stored in a car. The price for carrying this cotton from Memphis to Boston is about \$4 50 per bale of five hundred pounds. This is cheaper than it can be shipped down the Mississippi to New-Orleans, and thence by vessel, and the difference in time is about thirty days in favor of the Northern route. It comes to Cincinnati by river, and then by rail all the way to Boston. A

* West Indies and Guiana.

† West Indies, including Demarara.

‡ Brazil, including Portuguese Colonies.

§ East Indies and Mauritius.

|| Annual average from 1835 to 1839.

¶ Annual average from 1840 to 1844, during the Chinese war.

** Turkey and Egypt.

NOTE.—The amount imported from "other countries" was less in 1860 than for the year preceding. It was, in 1859, 11,804,912 lbs., and in 1860, 9,666,048 lbs., thus disappointing the expectations of those who anticipated a large increase. The supplies from "other countries"—British West Indies, Guiana, Mauritius, Turkey and South America—are not given separately in the *London Economist* of March 2d, 1860, from which the three last years are quoted.

small portion is brought all the way by rail, but the rates on this are a little higher. For the four months up to the first of February, the New-York Central carried from the Bridge and Buffalo 7,550 bales, and in February about 3,000. This month, from appearances, they will do the largest business they ever did."—*Buffalo Commercial*.

MOVEMENTS OF GRAIN.

Receipts at Buffalo for eleven years, from 1850 to 1860, inclusive.

YEAR.	Grain alone. Bushels.	Grain, including Flour. Bushels.	YEAR.	Grain alone. Bushels.	Grain, including Flour. Bushels.
1850,.....	6,618,004 ..	12,059,458	1857,.....	15,848,980 ..	19,578,695
1851,.....	11,449,661 ..	17,740,781	1858,.....	20,002,444 ..	27,812,980
1852,.....	13,892,987 ..	20,390,504	1859,.....	14,229,060 ..	21,530,722
1853,.....	11,078,741 ..	15,956,526	1860,.....	31,441,440 ..	37,053,115
1854,.....	18,553,455 ..	22,252,235			
1855,.....	19,788,473 ..	24,472,278	Total,...	185,526,812 ..	244,460,202
1856,.....	20,123,667 ..	25,753,907			

Receipts at Lake Ports first week in April, 1861.

	Flour. Bbls.	Wheat. Bush.	Corn. Bush.	Oats. Bush.	Barley. Bush.	Rye. Bush.
At Chicago,.....	15,585 ..	113,561 ..	117,327 ..	860 ..	5,971 ..	..
" Milwaukee,.....	6,501 ..	98,387 ..	998 ..	903 ..	913 ..	384
" Detroit,.....	8,588 ..	5,309 ..	5,705 ..	..	..	..
" Toledo,.....	13,588 ..	11,755 ..	56,775 ..	..	..	..
" Cleveland,.....	25,900 ..	9,440 ..	36,764 ..	192 ..	192 ..	400

The total receipts of grain, reducing flour to wheat, at Buffalo and Oswego, during the year 1860, were as follows :

At Buffalo,.....	bush.	37,053,115
" Oswego,.....		16,726,326
		<u>53,779,441</u>

Receipts at Toledo, quarter ending March 31st, 1861.

	Flour. Bbls.	Wheat. Bush.	Corn. Bush.	Oats. Bush.	Barley. Bush.	Rye. Bush.	Pork. Bbls.	Dressed Hogs. Pounds.
1861.								
January,.....	30,084 ..	41,138 ..	130,987 ..	..	434 ..	2,774 ..	29,002 ..	6,564,996
February,.....	26,313 ..	12,458 ..	96,736 ..	436 ..	..	2,873 ..	24,888 ..	804,374
March,.....	30,691 ..	13,632 ..	171,542 ..	433 ..	3,671 ..	100 ..	9,208 ..	..
	<u>97,088 ..</u>	<u>72,318 ..</u>	<u>399,305 ..</u>	<u>869 ..</u>	<u>4,105 ..</u>	<u>5,752 ..</u>	<u>63,108 ..</u>	<u>7,369,370</u>
In store Jan. 1st,....	..	150,733 ..	80,883 ..	7,333 ..	555 ..	1,592 ..	..	..
	<u>97,088 ..</u>	<u>223,956 ..</u>	<u>430,188 ..</u>	<u>8,102 ..</u>	<u>4,660 ..</u>	<u>7,344 ..</u>	<u>63,108 ..</u>	<u>7,369,370</u>

DETROIT STAVES.

The stave trade of the city of Detroit, and of the State of Michigan, has very quietly grown into one of large proportions, the amount turned out last year being estimated at eight millions, nearly all of which was for the European market. The *Detroit Tribune* says that the Michigan forests are peculiarly adapted to the production of "Eagle pipes," and something is now being done in that variety. Their dimensions are 7½

feet long, 6 inches wide and 3 inches thick. Their appearance is not unlike a well-shaped rail-road tie of the larger class, and they are designed, we learn, for shipment to Germany, where they are used for lager beer vats. The last report of the Detroit market says:

"The foreign demand is now very slack, and, as a consequence, the market here is dull, the decline on W. I. being \$4 per M. since last fall, only \$10 being now paid, delivered on the line of the rail-road. Our western buyers are mostly still operating to a moderate extent, but the buoyancy of the market is gone for the present. Notwithstanding these unfavorable circumstances, there is considerable activity in getting out staves, and they are beginning to arrive freely. From 200,000 to 250,000 are now on the dock of the Detroit and Milwaukie Rail-Road awaiting shipment."

COMMERCIAL REGULATIONS.

IMPORTATION OF GUANO UNDER THE PROVISIONS OF THE GUANO ACT OF AUGUST 18, 1856.

HAVING received official information from the Department of State that the islands noted below have been recognised by the issue of the proper certificate, as appertaining to the United States, for the purposes specified in the guano act of August, 18, 1856, the same is published for the information and government of officers of the customs and others concerned.

The special attention of collectors and other officers of the customs is called to the provisions of the 3d section of the act aforesaid, to wit:

"SEC. 3. *And be it further enacted*, That the introduction of guano from such islands, rocks or keys shall be regulated as in the coasting trade between different parts of the United States, and the same laws shall govern the vessels concerned therein."

There being no officer of the customs at the islands, rocks or keys in question to grant clearances or certify manifests, those provisions of the coasting laws which authorize, under certain circumstances, the omission of those papers, will apply to vessels engaged in this trade, and they will be put on the footing of vessels of the United States laden with domestic productions. But masters of such vessels will be required to have manifests subscribed by themselves of the cargo, and to exhibit the same, on demand, to officers of the customs for inspection. Regular entries at the custom-house must be made on arrival at the port of destination in the United States, and collectors of the customs are instructed to cause in all cases the cargo to be carefully inspected.

It will be perceived that the 3d section of the act aforesaid applies the provisions of the laws regulating the coasting trade to vessels employed in the transportation of guano from the islands, rocks and keys in question to ports in the United States.

Only such vessels, therefore, as can legally engage in the coasting trade of the United States, can be employed in such transportation. Foreign

vessels must, of course, be excluded, and the privilege confined to the duly documented vessels of the United States.

Starve, or Barren, lat. $5^{\circ} 40' S.$, long. $155^{\circ} 55' W.$

McKean, lat. $3^{\circ} 35' S.$, long. $174^{\circ} 17' W.$

Phoenix, lat. $3^{\circ} 35' S.$, long. $170^{\circ} 55' W.$

Enderbury, lat. $3^{\circ} 08' S.$, long. $171^{\circ} 08' W.$

Certificates for which have been issued to the Phoenix Guano Company.

Nevassa, lat. $18^{\circ} 10' N.$, long. $75^{\circ} W.$, certificate for which has been issued to E. K. Cooper.

Howland, lat. $00^{\circ} 52' N.$, long. $176^{\circ} 52' W.$, certificate for which has been issued to the United States Guano Company.

Jarvis, lat. $00^{\circ} 21' S.$, long. $159^{\circ} 52' W.$

Baker's, or New-Nantucket, lat. $00^{\circ} 15' N.$, long. $176^{\circ} 30' W.$, certificate for which has been issued to the American Guano Company.

BLOCKADE OF THE SOUTHERN PORTS.

Proclamation of the President of the United States, April 19th, 1861.

Whereas, an insurrection against the government of the United States has broken out in the States of South Carolina, Georgia, Alabama, Florida, Mississippi, Louisiana and Texas, and the laws of the United States for the collection of the revenue cannot be effectually executed therein, conformably to that provision of the Constitution which requires duties to be uniform throughout the United States;

And whereas, a combination of persons, engaged in such insurrection, have threatened to grant pretended letters of marque to authorize the bearers thereof to commit assaults on the lives, vessels and property of good citizens of the country lawfully engaged in commerce on the high seas, and in waters of the United States;

And whereas, an executive proclamation has been already issued, requiring the persons engaged in these disorderly proceedings to desist therefrom, calling out a militia force for the purpose of repressing the same, and convening Congress in extraordinary session to deliberate and determine thereon;

Now, therefore, I, ABRAHAM LINCOLN, President of the United States, with a view to the same purpose before mentioned, and to the protection of the public peace and the lives and property of quiet and orderly citizens pursuing their lawful occupations, until Congress shall have assembled and deliberated on the said unlawful proceedings, or until the same shall have ceased, have further deemed it advisable to set on foot a blockade of the ports within the States aforesaid, in pursuance of the laws of the United States and of the law of nations in such case provided. For this purpose a competent force will be posted so as to prevent entrance and exit of vessels from the ports aforesaid. If, therefore, with a view to violate such blockade, a vessel shall approach or shall attempt to leave any of the said ports, she shall be duly warned by the commander of one of the blockading vessels, who will endorse on her register the fact and date of such warning; and if the same vessel shall again attempt to enter or leave the blockaded port, she will be captured and sent to the nearest convenient port for such proceedings against her and her cargo as prize as may be deemed advisable.

And I hereby proclaim and declare, that if any person, under the pretended authority of the said States, or under any other pretence, shall molest a vessel of the United States, or the persons or cargo on board of her, such persons will be held amenable to the laws of the United States for the prevention and punishment of piracy.

In witness whereof, I have hereunto set my hand and caused the seal of the United States to be affixed. Done at the City of Washington, this nineteenth day of April, in the year of our Lord one thousand eight hundred and sixty-one, and of the independence of the United States the eighty-fifth.

ABRAHAM LINCOLN.

WILLIAM H. SEWARD, *Secretary of State.*

BLOCKADE OF NORTH CAROLINA AND VIRGINIA PORTS.

Proclamation of the President of the United States, April 27th, 1861.

"BY THE PRESIDENT OF THE UNITED STATES OF AMERICA:

"Whereas, for the reasons assigned in my proclamation of the 19th instant, a blockade of the ports of the States of South Carolina, Georgia, Florida, Alabama, Louisiana, Mississippi and Texas was ordered to be established; and, whereas, since that date public property of the United States has been seized, the collection of the revenue obstructed, and duly commissioned officers of the United States, while engaged in executing the orders of their superiors, have been arrested and held in custody as prisoners, or have been impeded in the discharge of their official duties, without due legal process, by persons claiming to act under authority of the States of Virginia and North Carolina, an efficient blockade of the ports of these States will therefore also be established.

"In witness whereof, I have hereunto set my hand and caused the seal of the United States to be affixed. Done at the City of Washington, this 27th [L. S.] day of April, in the year of our Lord one thousand eight hundred and sixty-one, and of the independence of the United States the eighty-fifth.

"By the President,

ABRAHAM LINCOLN.

"WILLIAM H. SEWARD, *Secretary of State.*"

TO COLLECTORS, SURVEYORS AND OTHER OFFICERS OF THE CUSTOMS ON THE NORTHERN WATERS OF THE UNITED STATES.

Treasury Department, May 2d, 1861.

On the 19th day of April, 1861, the President of the United States, by proclamation, declared the ports of South Carolina, Georgia, Florida, Alabama, Louisiana, Mississippi and Texas under blockade; and on the 27th of the same month, by another proclamation, declared the ports of Virginia and North Carolina also under blockade, since which proclamation this department has received reliable information that attempts are frequently made to furnish arms, munitions of war, provisions and other supplies to persons and parties in those States in open insurrection against the constitutional authorities of the Union. It becomes my duty, therefore, to instruct you to cause a careful examination to be made of the manifests of all steam or other vessels departing from your port with cargoes whose ultimate destination you have satisfactory reasons to believe is for any port or place under the control of such insurrectionary parties, and to compare the same with the cargo on board; and if any such manifests be found to embrace any articles of the description before mentioned, or any such articles be found to constitute a part of the cargo, you will take all necessary and proper means to prevent the departure of the vessel, and to detain the same in your custody until all such articles shall be removed therefrom, and for further proceedings according to law. You will also make a careful examination of all flat-boats and other water craft without manifests, and of rail-road cars and other vehicles, arriving at or leaving your port, laden with merchandise, the ultimate destination of which you have good reason to believe is for any port or place under insurrectionary control; and if arms, munitions of war, provisions or other supplies are found having such destination, you will seize and detain the same, to await the proper legal proceedings for confiscation and forfeiture.

In carrying out these instructions, you will bear in mind that all persons or parties in armed insurrection against the Union, however such persons or parties may be organized or named, are engaged in levying war against the United States, and that all persons furnishing to such insurgents arms, munitions of war, provisions or other supplies, are giving them aid and comfort, and so guilty of treason within the terms of the second section of the third article of the Constitution. And you will therefore use your utmost vigilance, and endeavor to prevent the prohibited shipments, and to detect and bring to punishment all who are in any way concerned in furnishing to such insurgents any of the articles above described. You will, on the other hand, be careful not to interrupt, vexatiously or beyond necessity, by unwarranted or protracted detentions and examinations, the regular and lawful commerce of your port. You will report forthwith whether any, and if any, what additional measures may be necessary, in your judgment, to carry into full effect the foregoing resolutions, and you will report to this department, from time to time, your action under these instructions.

I am, very respectfully,

S. P. CHASE, *Secretary of the Treasury.*

COMMERCIAL CHRONICLE AND REVIEW.

CONDITION OF COMMERCIAL AFFAIRS—SOUTHERN COMMERCE—LETTERS OF MARQUE—IMPORTS OF FOREIGN DRY GOODS—EXPORTS FROM NEW-YORK TO FOREIGN PORTS—CASH DUTIES AT NEW-YORK—FOREIGN IMPORTS AT NEW-YORK—CONTRIBUTIONS IN DEFENCE OF THE UNION—ALBANY BANK FAILURES.

THE unfavorable condition of commercial affairs, reported in our last number, has not been ameliorated since that time. On the contrary, the stagnation indicated in the months of March and April has increased. The non-reception of our usual supplies of Southern produce for foreign export is strongly felt. The light importations of foreign goods at this and other ports are among the prominent features of the season, resulting in continued and lower rates of foreign exchange at this port. The government has commenced its policy of blockade of the Southern ports, which will be thoroughly and effectually sustained by the naval forces of the country.

Southern commerce is thus, for the time, crushed. There can be no outlets for the cotton, tobacco and rice of the South; but this is the inevitable result of the revolution among the seceding States. Congress has power further to close all the Southern ports as "ports of entry;" a measure which would permanently drive all foreign and coastwise commerce from those harbors. The Southern Confederacy has issued a proclamation authorizing *letters of marque*.

It has been strongly urged by cotemporary writers that an unrecognised government possesses no power to issue *letters of marque* and reprisal, and, under the law of nations and all laws, any vessel sailing under such a flag, and seizing a merchantman, would commit robbery on the high seas, and be guilty of piracy, and every man on board of her would be subject to the penalty of death. By the law of nations, piracy is robbery upon the sea. By the laws of the United States, any person who shall commit the crime of robbery or murder on the high seas shall be deemed a pirate. Then what is robbery on the high seas? The Supreme Court have decided that all persons are pirates on board vessels which throw off their national character by cruising piratically and committing plunder of other vessels. The question has been settled by the Supreme Court, in the case of *THE UNITED STATES vs. KLINTOCK, 5 Wheaton*. That was tried in Virginia, and decided by Virginia's Chief-Justice MARSHALL. The prisoner had been fitted out with a privateer commission, purporting to be from the "Mexican Republic," and he seized a vessel and took her into Savannah as a prize. This was in 1820, before the Mexican Republic was acknowledged, and Chief-Justice MARSHALL held, that the assumed chief had no power, as an officer of the Mexican Republic unacknowledged, to give commissions to authorize private or public vessels to make captures at sea. This settles the point, and it follows the English law that no commission of a vessel to seize other vessels on the high seas can be recognised when issued by an unacknowledged government.

In the matter of dry goods the business of the year 1861, so far, is very limited, compared with the past two years. The entries under

the new tariff are, however, large in the single month of April. We annex the returns for the four months:

IMPORTS OF FOREIGN DRY GOODS AT THE PORT OF NEW-YORK FOR FOUR MONTHS FROM JANUARY 1st.

ENTERED FOR CONSUMPTION.

<i>Manufactures of</i>	1858.	1859.	1860.	1861.
Wool,.....	\$ 3,084,304 ..	\$ 10,442,018 ..	\$ 10,411,495 ..	\$ 4,816,073
Cotton,.....	2,905,522 ..	9,846,810 ..	7,468,582 ..	2,311,126
Silk,.....	4,920,197 ..	11,508,681 ..	13,494,206 ..	5,778,296
Flax,.....	1,143,309 ..	3,926,080 ..	3,016,549 ..	1,140,116
Miscellaneous,.....	1,058,046 ..	2,356,285 ..	1,932,007 ..	1,356,856
Total,.....	13,061,578 ..	38,074,378 ..	36,257,929 ..	15,402,467

WITHDRAWN FROM WAREHOUSE.

<i>Manufactures of</i>	1858.	1859.	1860.	1861.
Wool,.....	\$ 1,753,102 ..	\$ 659,583 ..	\$ 1,019,681 ..	\$ 3,317,967
Cotton,.....	2,536,089 ..	994,539 ..	1,539,664 ..	3,106,206
Silk,.....	2,077,839 ..	379,923 ..	712,875 ..	2,933,486
Flax,.....	1,185,683 ..	516,243 ..	418,782 ..	1,162,139
Miscellaneous,.....	729,820 ..	204,047 ..	315,462 ..	602,854
Total,.....	8,311,533 ..	2,754,335 ..	4,006,464 ..	11,122,652
Add ent'd for consump.,	13,061,578 ..	38,074,378 ..	36,257,929 ..	15,402,467
Total on market,....	21,373,111 ..	40,828,713 ..	40,264,393 ..	26,525,119

ENTERED FOR WAREHOUSING.

<i>Manufactures of</i>	1858.	1859.	1860.	1861.
Wool,.....	\$ 763,655 ..	\$ 557,607 ..	\$ 1,084,113 ..	\$ 3,086,372
Cotton,.....	1,255,507 ..	528,749 ..	1,084,960 ..	3,145,933
Silk,.....	765,607 ..	203,059 ..	655,497 ..	2,980,832
Flax,.....	434,506 ..	213,381 ..	162,380 ..	1,171,151
Miscellaneous,.....	316,963 ..	118,273 ..	290,955 ..	557,259
Total,.....	3,536,248 ..	1,621,069 ..	3,280,905 ..	10,941,047
Add ent'd for consump.,	13,061,578 ..	38,074,378 ..	36,257,929 ..	15,402,467
Total entered at port,	16,597,826 ..	39,695,447 ..	39,538,834 ..	26,343,514

The following will show the value of the different manufactures of dry goods imported at New-York for ten months of three fiscal years:

<i>Manufactures of</i>	1859.	1860.	1861.
Wool,.....	\$ 25,586,400 ..	\$ 31,072,300 ..	\$ 27,035,700
Cotton,.....	15,311,300 ..	19,534,000 ..	13,649,300
Silk,.....	23,862,300 ..	31,923,200 ..	26,651,100
Flax,.....	7,500,200 ..	8,710,500 ..	6,442,800
Miscellaneous,.....	4,994,400 ..	5,487,800 ..	5,839,900
Total,.....	\$ 77,264,600 ..	\$ 96,727,800 ..	\$ 75,618,800

EXPORTS FROM NEW-YORK TO FOREIGN PORTS FOR THE MONTH OF APRIL.

	1858.	1859.	1860.	1861.
Domestic produce,.....	\$ 5,513,117 ..	\$ 5,950,921 ..	\$ 6,638,682 ..	\$ 9,255,648
Merchandise (free),.....	155,416 ..	441,489 ..	254,772 ..	209,573
Merchandise (dutiable),...	432,393 ..	382,289 ..	482,489 ..	231,784
Specie and bullion,.....	646,285 ..	6,259,167 ..	2,995,502 ..	1,412,674
Total exports,.....	6,746,211 ..	13,033,866 ..	10,371,415 ..	11,109,679
Exclusive of specie,....	6,077,926 ..	6,774,699 ..	7,375,913 ..	9,697,005

The exports for the four months since January 1st, show a favorable result; the movement in breadstuffs has been again large.

Thus the export of domestic produce is nearly one-half more than in April, 1860.

EXPORTS FROM NEW-YORK TO FOREIGN PORTS FOR FOUR MONTHS, FROM JANUARY 1.

	1858.	1859.	1860.	1861.
Domestic produce,...	\$ 17,934,664 ..	\$ 18,374,535 ..	\$ 24,635,808 ..	\$ 40,351,800
Merchandise (free),...	509,993 ..	949,967 ..	1,009,690 ..	856,733
Merch'dise (dutiable),	1,699,445 ..	1,175,339 ..	2,358,011 ..	1,966,714
Specie and bullion,...	9,975,010 ..	14,279,959 ..	7,207,736 ..	2,876,296
Total exports,.....	30,119,112 ..	34,780,800 ..	35,410,735 ..	46,051,043
Exclusive of specie,	20,344,102 ..	20,500,341 ..	28,202,999 ..	43,174,747

The exports of the ten months of the fiscal year are about eleven millions in excess of last year. The following is a brief comparison of the shipments of produce, to which we have added, at the foot, the shipments of specie. These were large in the first months of the fiscal year.

It is interesting to bring forward the total of exports from this port for the expired portion of the fiscal year, as the aggregate, exclusive of specie, is far beyond all former precedent. We have, therefore, compiled a table showing the comparative shipments of the produce and merchandise since the 1st of July:

EXPORTS, EXCLUSIVE OF SPECIE, FROM NEW-YORK TO FOREIGN PORTS FOR TEN MONTHS ENDING WITH APRIL.

	1858.	1859.	1860.	1861.
Six months,.....	\$ 34,702,441 ..	\$ 27,994,834 ..	\$ 36,871,058 ..	\$ 59,924,434
January,	4,689,739 ..	4,114,008 ..	6,022,462 ..	11,143,843
February,	4,178,577 ..	3,735,633 ..	6,675,870 ..	10,804,307
March,	5,180,860 ..	5,876,001 ..	8,128,754 ..	11,629,592
April,	6,099,926 ..	6,774,699 ..	7,375,913 ..	9,697,006
Total,	54,846,643 ..	48,495,175 ..	64,574,057 ..	103,099,181
Specie for the same, ..	31,937,122 ..	27,921,431 ..	43,725,630 ..	23,487,715
Total exports,	86,783,665 ..	76,416,606 ..	108,299,687 ..	126,586,896

The above shows a decline during the ten months of the fiscal year, in the shipments of specie, of twenty million dollars, and an increase, during the same time, of nearly forty millions in the exports of merchandise and produce. This is the largest exhibit of export commerce ever made at this port, the total being far beyond all former precedents.

The receipts for cash duties of course show a decrease in the aggregate, keeping pace with the import of goods at the port. The following is a comparative summary:

CASH DUTIES RECEIVED AT NEW-YORK.

	1858.	1859.	1860.	1861.
Six months,...	\$ 16,345,553 57	\$ 15,387,618 49	\$ 19,323,060 96	\$ 17,637,903 21
In January,...	1,641,474 59	3,478,471 38	3,899,166 17	2,059,202 33
February,	2,063,784 86	3,328,688 93	3,378,043 28	2,528,736 83
March,	2,213,452 15	3,164,011 25	3,477,545 74	2,489,926 25
April,	1,736,510 41	3,212,060 49	2,444,267 96	1,643,261 99
Total ten mos.,	24,000,775 58	28,570,850 54	32,521,984 11	26,358,929 61

The amount of cash duties has decreased in New-York, it appears, more than six millions, compared with last year.

By the monthly statement of the commerce of this port for April it will be seen that the total of dutiable goods, entered directly for consumption during the last month, was only about half the amount for the corresponding month of last year. The entries for warehousing have been about the same; but the entries of free goods show a gain of one million, and the receipts of specie an increase of nearly two millions. The following is a comparative summary of foreign imports at New-York for the month of April, 1857 to 1861;

FOREIGN IMPORTS AT NEW-YORK, 1857 TO 1860, FOR THE MONTH OF APRIL.

ENTERED	1857.	1858.	1859.	1860.	1861.
For consumption, ..	\$ 11,155,530 ..	\$ 5,837,546 ..	\$ 15,595,741 ..	\$ 10,407,966 ..	\$ 5,393,809 ..
“ warehousing, ..	8,168,142 ..	2,148,241 ..	3,754,895 ..	4,127,857 ..	4,187,678 ..
Free goods,	955,428 ..	2,658,381 ..	2,802,542 ..	2,386,347 ..	3,351,905 ..
Specie and bullion,	989,218 ..	524,857 ..	272,441 ..	49,186 ..	1,953,001 ..
Total, April,	\$ 21,218,318 ..	\$ 11,169,025 ..	\$ 22,425,619 ..	\$ 16,971,356 ..	\$ 14,886,393 ..
Withdrawn,	2,287,815 ..	3,208,589 ..	1,548,561 ..	2,069,423 ..	1,761,245 ..

Without the imports of specie, the remaining imports since January 1st, are about twenty-two million dollars less than for the corresponding four months of 1859 and 1860. We annex our usual comparison :

FOREIGN IMPORTS AT NEW-YORK FOR FOUR MONTHS, FROM JANUARY 1ST.

ENTERED	1857.	1858.	1859.	1860.	1861.
For consumption, ..	\$ 57,314,960 ..	\$ 23,093,845 ..	\$ 61,697,937 ..	\$ 57,559,878 ..	\$ 27,276,106 ..
“ warehousing, ..	19,066,289 ..	7,200,542 ..	9,025,517 ..	11,991,133 ..	19,584,223 ..
Free goods,	6,592,569 ..	8,567,911 ..	10,301,888 ..	11,560,620 ..	12,363,850 ..
Specie and bullion,	3,911,278 ..	1,351,691 ..	517,615 ..	552,505 ..	17,035,703 ..
Total, four months,	\$ 86,885,046 ..	\$ 40,213,469 ..	\$ 81,542,407 ..	\$ 81,664,186 ..	\$ 76,259,863 ..
Withdrawn from warehouse,	10,101,989 ..	16,886,251 ..	7,518,056 ..	9,572,218 ..	15,803,390 ..

The imports for the ten months of the present fiscal year show a large decrease over the previous year, in the aggregate. If we omit the heavy aggregate of bullion and coin imported, we shall find that the imports of miscellaneous goods are below the dull period of 1858.

FOREIGN IMPORTS AT NEW-YORK FOR TEN MONTHS, ENDING APRIL 30, 1857—1861.

	1857.	1858.	1859.	1860.	1861.
Six months,	\$ 105,254,740 ..	\$ 109,688,702 ..	\$ 91,082,433 ..	\$ 116,000,643 ..	\$ 120,542,384 ..
January,	19,006,732 ..	8,105,719 ..	19,447,962 ..	21,756,373 ..	26,837,411 ..
February,	25,524,492 ..	9,209,043 ..	18,843,370 ..	19,356,379 ..	16,841,707 ..
March,	21,135,504 ..	11,729,702 ..	20,820,456 ..	23,580,126 ..	18,204,851 ..
April,	21,218,318 ..	11,169,025 ..	22,425,619 ..	16,971,358 ..	14,886,393 ..
Total 10 months,	\$ 192,139,786 ..	\$ 149,902,191 ..	\$ 172,624,840 ..	\$ 197,664,778 ..	\$ 196,802,246 ..

The following is a recapitulation of contributions, by banking institutions and individuals, for the defence of the Union :

Connecticut,	\$ 2,160,000	New-Hampshire,	58,000
Indiana,	1,052,000	New-Jersey,	2,231,000
Illinois,	3,553,000	Ohio,	3,348,000
Iowa,	100,000	Pennsylvania,	3,080,000
Kansas,	20,000	Rhode Island,	523,000
Maine,	1,855,000	Vermont,	1,027,000
Massachusetts,	3,740,000	Wisconsin,	1,077,000
Michigan,	1,100,000		
New-York,	5,831,000		\$ 31,105,000

All this money must be returned by the United States hereafter to the several States as in the war of 1812—15.

The Finance Committee of the Chamber of Commerce have issued the following notice :

The undersigned, a committee of the Chamber of Commerce, having, by a sub committee, recently visited Washington to confer with the Secretary of the Treasury on the subject of the loans, which he is authorized by law to issue, they beg to call the attention of the public to the particulars of these loans, as follows :

1st. A loan of about nine millions dollars, which will be issued in bonds or stock having twenty years to run, and at six per cent. interest. For this proposals are invited, and it will be awarded to the highest bidder, at Washington, on Tuesday, the 21st instant.

2d. A loan of fourteen millions dollars [\$14,000,000,] which is limited by the law of June, 1860, at par. This loan is now advertised to be awarded on the 30th instant, but from its limitation it will probably have to be issued in Treasury Notes having two years to run, and convertible into twenty years stock or bonds, as above, at the pleasure of the holder; which notes the Secretary is by law authorized to substitute, and which are also restricted to par.

And the committee invite all capitalists and moneyed institutions to avail of these opportunities for investment.

Committee.—PELATIAH PERIT, STEWART BROWN, WILLIAM H. ASPINWALL, J. J. ASTOR, JR., AUGUST BELMONT, JAMES GALLATIN, A. T. STEWART, J. M. MORRISON, MOSES TAYLOR, GEORGE S. COE, F. A. PALMER, JOHN Q. JONES, D. R. MARTIN, JACOB CAMPBELL, JR.

The failures of the Bank of Albany and of the Bank of the Capitol, at Albany, have given rise to some uneasiness; but the loss in these cases will fall upon stockholders only. So much commercial paper has recently gone to protest in this State, that the assets of our banking institutions are seriously lessened. In addition to these are the failures of the National Bank and the Bank of the Interior, both at Albany.

The currency of the Western States is now undergoing a severe crisis. The bills of those banks that have been founded on the bonds of the States of Virginia, Missouri and Tennessee, are for the present in jeopardy, owing to the serious decline in the market values of those securities.

We have the important intelligence that the British government will remain strictly neutral in respect of affairs incident to the rebellion in the United States. The British government has issued a proclamation, warning British subjects against engaging in the American war, and stating that all doing so will be held responsible for their own acts. The proclamation declares the intention to maintain the strictest impartial neutrality between England and the government of the United States and certain States styling themselves the Confederate States of America. It warns all British subjects, if they enter the military service of either side, or join ships of war, or transports, or attempt to get recruits, or fit out vessels for war purposes or transports, *or break or endeavor to break any blockade, lawfully or actually established*, or carry soldiers, despatches, or any material contraband of war, for either party, that they will be liable to all the penalty and consequences, and will do so at their peril, and in nowise obtain the protection of the British government. It was announced in the House of Lords that Spain had given assurances, in accepting the annexation of the eastern portion of St. Domingo, that African slavery should not be re-established. Mr. GLADSTONE stated in the House of Commons that the Mail contract with the Galway Steamship Line had terminated. The Cotton Growing Company of Jamaica had determined to plant several thousand acres forthwith, so that the crop may be delivered in Manchester before the end of the year.

FOREIGN CORRESPONDENCE

OF THE MERCHANTS' MAGAZINE AND COMMERCIAL REVIEW.

LONDON, *May 4th*, 1861.THE principal topic of discussion for two weeks has been *The Budget*.

The debate on Mr. GLADSTONE's proposition was virtually concluded on Thursday night, 2d inst., when a division took place, which resulted in a majority of eighteen for the government, viz.: 299 for and 281 against it. In this result the ministry have not much cause for triumph. The point on which the struggle took place was, whether the tea duty should be lowered from 1s. 5d. to 1s. per pound, in preference to allowing the paper duty to be abolished, and the country at large were evidently in favor of the reduction in the tea duty, although they were not desirous of any event that might embarrass the preliminary debate, originated by Mr. THOMAS BARING. Mr. BARING had two objects in view, one, to show that Mr. GLADSTONE's financial calculations could not be depended upon; the other, that a portion of the estimated surplus had better be appropriated to the reduction of the duty on tea instead of the abolition of the paper tax. No fewer than seventeen gentlemen succeeded Mr. BARING in the debate, about half in defence of the *Budget* propositions, the others in opposition to them. The debate was long and wearisome. The object of the attack on the *Budget* was to give a "quiet snub to Mr. GLADSTONE," and by that means "splinter the cabinet."

Compared with the corresponding month of 1860, the trade of the country, represented by exports, appears to have increased about five per cent., their total declared value amounting to £10,950,830, against £10,393,470. The branches of our manufactures contributing chiefly to the increase are cottons, linens and woollens, the extension of trade being principally with the continent. The exports of lead to France and China also show an increase. In silk manufactures there is very little difference, an improvement in some descriptions being about counterbalanced by a falling off in others. The leather, iron and copper trades appear to have retrograded; and in the exports of the plates the decrease is fifty per cent. For the first quarter of the year the exports show a material reduction to the United States, the totals being as follows:

MARCH.		FIRST QUARTER.	
1860.	1861.	1860.	1861.
£ 1,488,000	£ 1,298,000	£ 5,084,000	£ 3,573,000

The decline, compared with the same period of 1860, is large in those articles usually demanded by the American trade, viz.:

	JULY.		FIRST QUARTER.	
	1860.	1861.	1860.	1861.
Cotton manufactures, ...	£ 245,000	£ 252,000	£ 1,210,000	£ 923,000
Linen goods,	120,000	173,000	527,000	355,000
Woollen cloths,	84,000	74,000	250,000	199,000
" mixed goods, &c.,	148,000	184,000	483,000	424,000
" worsted,	103,000	84,000	342,000	244,000
Tin plates,	106,000	36,000	266,000	65,000
Silks,	20,000	29,000	93,000	75,000
Millinery,	170,000	160,000	524,000	421,000
Iron and steel,	265,000	140,000	646,000	418,000

A large business has been done in April in the Liverpool cotton market, at improving rates, and a further advance, equal to three-quarters of a cent per pound, has been conceded. Prices are now two cents per pound above those current at this time last year. A speculative demand sprung up last week on receipt of the news of hostilities having commenced in the United States. The stock now held is 75,000 bales less than it was twelve months ago.

At LLOYD's, war premiums have been demanded of one to one and a half per cent. on American vessels that have sailed from New-Orleans, and three per cent. on vessels that have yet to start. For American ships from New-York the charge is only one-half per cent.

Wednesday, the first, was a holiday at the Stock Exchange, the transfer books at the bank being closed for the half-yearly balancing of their books.

The East India and China Association have issued their usual statements of the number and tonnage of ships, both British and foreign, that have entered inwards and cleared outwards with cargo from and to places "within the limits of the late East India Company's charter" for three months, ending 31st of March, in the years 1861 and 1860, respectively. From this it appears that in the past three months of 1861 there were 305 vessels of 175,785 tons, while in the like period of 1860 there were 330 vessels of 217,510 tons for the entries inwards, showing a falling off of 25 vessels and 41,725 tons. The entries outwards for the like period were 311 vessels of 214,877 tons in 1861, against 347 vessels of 253,432 tons in 1860, exhibiting a decrease of 36 vessels and 38,655 tons.

At the request of the Turkish government, the British Board of Trade has sent out persons properly qualified to assist in the investigation into the finances of the empire, with a view to their adjustment upon some defined basis. French officers are said already to have reached Constantinople on a similar mission.

Cotton is the leading topic of interest out of London. Official reports show the following shipments of cotton from Alexandria from the 3d of October to the 1st of April:

	GREAT BRITAIN. <i>Bales.</i>		FRANCE. <i>Bales.</i>		AUSTRIA. <i>Bales.</i>		Total <i>Bales.</i>
1856-1857.....	32,520	....	8,712	....	9,347	....	50,579
1857-1858.....	34,762	....	10,051	....	6,982	....	51,745
1858-1859.....	46,886	....	16,027	....	8,983	....	71,896
1859-1860.....	66,820	....	14,999	....	5,504	....	87,323
1860-1861.....	65,071	....	22,273	....	4,319	....	91,663

The attempt, so long desired by the cotton States, to establish a line of steam communication with England, is about to be tried at Liverpool. A prospectus has been issued of a Liverpool and New-Orleans Steam Navigation Company, with a capital equal to \$1,000,000, in shares of \$250 each. The vessels are to run monthly, and are expected to commence during the ensuing summer. Mr. JOSHUA SCHOFIELD, the member for Birmingham, is to be on the direction, and the other supporters of the undertaking are Mr. CHARLES HOLLAND, of Liverpool, a director of the Demerara Railway Company; Mr. CHARLES ROBERTSON, of Liverpool, merchant; Mr. FRANCIS BOULT, of the firm of BOULT, ENGLISH & BRANDON, of Liverpool; and Messrs. HOGTON, RANKIN & Co., of New-Orleans. Additional names, it is promised, will soon be published. As

a speculation to attract the public there can be little hope of its being responded to. If it be launched at all it will be through the personal contributions of houses directly interested in the southern trade.

The failure of the two great firms of BATAZZI & Co. and HAVA & Co., at Marseilles, in the Greek trade, created much anxiety, lest suspensions should follow in London. The Marseilles stoppages took place in consequence of a sudden withdrawal of facilities by the Bank of France; and at a meeting of Greek merchants held in London this afternoon it has been resolved to send a deputation to that establishment to induce it, it is supposed, to relax its policy. The failure of Messrs. P. HAVA & Co., one of the oldest and most respectable of our Greek firms, was announced this week, but it is believed that their assets are good and will yield a large surplus. Whether any other firms in the same interest will have to suspend is a point that remains doubtful. There is no question of the general solvency of the merchants in this trade, provided the Turkish government, to whom they have made imprudent advances, fulfil their obligations.

RICHARD COBDEN has written a letter to the Mayor of Manchester, in which the following passage occurs:

"We are not, I trust, taking too sanguine a view of the effects of the recent commercial arrangement in assuming that its influence will be felt beyond the limits of the two countries immediately concerned. When England and France are found co-operating, whether in peace or war, for the attainment of a common object, they can hardly fail to make their policy triumphant throughout Europe, and looking at the negotiations now going on elsewhere, and the indications generally manifested, I am led to the conclusion that ere long the example of those two nations will induce the whole continent to adopt a more liberal commercial policy. In the mean time, whatever hesitation there may be in Europe, or whatever temporary backsliding in America, it is satisfactory to know that England, speaking through the voice of Manchester, remains faithful to the principle of unconditional freedom of trade; if it be accompanied with reciprocity from other countries, so much the better for her and them—if not, so much the better for her than them. In any case, liberty will bring its own reward."

Mr. COBDEN was to leave Algiers on the 23d, and it is probable that he will resume his parliamentary duties about the second week in May. His health, we are happy to learn, is greatly improved. In passing through the south of France it is his intention to consult the most eminent wine-producers and shippers as to the best method of levying a duty on wines, so as to remove the dissatisfaction felt in England regarding the working of the alcoholic test. There is an *on dit* afloat that a week or two back Mr. COBDEN received from Lord PALMERSTON a letter, intimating the willingness of the Queen to bestow upon the honorable gentleman some mark of her high sense of the important services rendered by him in negotiating the commercial treaty with France. It is said that Mr. COBDEN respectfully declined to receive the proffered honor.

A few days since tenders were received for the supply of forty locomotives for the Russian railways. There were numerous offers from English and French manufacturers, but the contract, it is said, is given to COCKERILL & Co., of Liege, who presented the lowest tender, 63,000*l.* the engine. A manufacturer at La Villette, near Paris, has obtained a

contract for the supply of five hundred wagons for the railway from Alicante to Seville. Another manufacturer has obtained a contract for the supply of 1,200 tons of iron for the same company.

The treaty between Switzerland and Italy for carrying a railway over the Luckmanier has been concluded. Switzerland is to contribute 48,000,000*f.* towards the cost of construction. The treaty also stipulates that when 25,000,000*f.* of this amount shall have been guaranteed, and 5,000,000*f.* actually spent on the construction of the railway, the kingdom of Italy will within four years contribute 20,000,000*f.*, which will not, however, bear interest. It has been further stipulated that the cost of laying the railway over that portion of the Alps between Dissentis and Olivone shall be defrayed by the kingdom of Italy. The Canton of St. Gall has already voted 5,000,000*f.* towards the expenses.

FREIGHTS AT LIVERPOOL.

	<i>Boston.</i>				<i>New-York.</i>				<i>Philadelphia.</i>				<i>New-Orleans.</i>						
<i>Balls</i> ,	0 <i>s.</i>	0 <i>d.</i>	to	0 <i>s.</i>	0 <i>d.</i>	..	0 <i>s.</i>	0 <i>d.</i>	to	0 <i>s.</i>	0 <i>d.</i>	..	0 <i>s.</i>	0 <i>d.</i>	to	0 <i>s.</i>	0 <i>d.</i>		
<i>Bars</i> ,	10	0	"	0	0	..	8	0	"	0	0	..	10	0	"	0	0		
<i>Fine Iron, &c.</i> , 10	0	"	0	0	0	..	9	0	"	0	0	..	10	0	"	0	0		
<i>Chemicals</i> , ...	10	0	"	0	0	..	12	6	"	0	0	..	10	0	"	11	0		
<i>Salt</i> ,	nominal.				..	nominal.				..	nominal.				..	nominal.			
<i>Dry Goods</i> , ..	10	0	"	15	0	..	10	0	"	17	6	..	12	6	"	20	0		
<i>Hardware</i> , ...	12	6	"	15	0	..	10	0	"	12	6	..	15	0	"	20	0		
<i>Earthenware</i> , 4	6	"	0	0	0	..	7	0	"	0	0	..	7	0	"	0	0		
<i>Passengers</i> , ..	£3 1 <i>s.</i>				..	£3 17 <i>s.</i> 6 <i>d.</i>				..	£3 10 <i>s.</i>				..	£4 0 <i>s.</i>			
	24				24 nom.				..	25.			

The Tribunal of Commerce has dissolved the company of the Caisse Mirès, and appointed official administrators to wind up its affairs. On the part of Count de Germiny it was stated that, by instruction of the Minister of Finance, he was obliged to resign his post. An advocate, who appeared for M. MIREs, said that, though that gentleman maintained the protest he had made against all that had been done with regard to his company since his arrest, he had no objection to offer to the present application, and acknowledged that Count de Germiny had rendered immense services to the company. The tribunal declared the company of the Caisse Générale des Chemins de Fer dissolved, and appointed MM. BORDIAUX and RICHARDIERE to wind up its affairs.

There has been more activity in the Scotch pig iron trade during the month of March, the shipments within that period having reached a total of 25,161 tons as compared with 20,620 tons last year. Since the commencement of the year the shipments had exhibited great dullness, but a better state of things may probably be now anticipated. The reduction in the rate of discount is beginning to exercise a beneficial influence on the wool market. Prices have not exhibited any change, but holders are firm, and consumers are operating rather more freely. A limited liability company has been formed for the purpose of establishing a line of steamers between Newcastle and Dundee.

THE BOOK TRADE.

1. *A Critical Dictionary of English Literature and British and American Authors, living and deceased, from the earliest accounts to the middle of the Nineteenth Century. Containing thirty thousand Biographies and Literary Notices, with forty indexes of subjects.* By S. AUSTIN ALLIBONE. Vol. 1. Royal octavo, pp. 1,004, double columns. CHILDS & PETERSON, Philadelphia.

THIS is one of the choice books of the age. It enters upon a field hitherto unoccupied in this country, and embracing men and things which should be familiar to the whole reading community. To the legislator and the lawyer, the clergyman and the editor, the Dictionary is of inestimable value. It is, in fact, the key to hundreds of thousands of volumes which otherwise would be, to the mass of readers, *sealed books*. In addition to a biographical sketch of authors and of writers, Mr. ALLIBONE gives a list of the writings of each, the dates of publication, and critical notes on both the authors and their works. These notices are either taken from the writings of cotemporary authors, from the reviews and magazines of the day, or (as in many cases) are original. Even this department of the work has involved a deep research into the depths of thousands of volumes; and the opinions of the learned are thus brought prominently before us.

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The only work of a similar character, possessing much value, was WATTS' *Bibliotheca Britannica*, published in the year 1824, in four quarto volumes. This work was the result of a life's labor, and finally impoverished the author, and he died without knowing the estimation in which it was held.

The second volume of Mr. ALLIBONE's work will exceed in value the first. It will contain an alphabetical list of subjects, and give the titles of the various works written and published in reference thereto. Few persons now know, for instance, the volume published in reference to the history of the individual States of this Union. Of some the history is, unfortunately, unwritten; and the material for such history are scattered to the winds. We shall soon be supplied with the conclusion of the Dictionary, which will enable us to ascertain readily the names of all works upon any subject of inquiry.

2. *The Ordeal of Free Labor in the British West Indies.* By WM. G. SEWELL. 12mo. pp. 324. HARPER & BROTHERS, N. Y.

The object of this book is to bring before the public the results of emancipation in the British West Indies; to give, as free from comment as possible, such information as he has obtained from personal observation and reference to reliable sources, about its present population, their customs, habits, commerce, industry and their government. It is not intended to draw any inferences, favorable or unfavorable, between emancipation in the United States and the West Indies; for the social and political condition of the two countries forbid any comparison; but to deny the too prevalent opinions, that the negro is unable to work without a master, is incapable of high civilization, and thus emancipation has ruined the West Indies.

The first ten chapters are devoted to the Windward Islands, First Impressions, Barbadoes and its Capital, the Governing Classes and Colored Population of Barbadoes; the Experience of Free and Slave Labor there; the present Social Distinctions; the Commerce and Prosperity of these Islands, and the condition of St. Vincent, Grenada, Tobago and St. Lucia since emancipation. Four chapters describe Trinidad, its characteristics; the Creoles of African descent; the Scheme of Asiatic Immigration; its Cultivation and Commerce; then the Prosperity of and Want of Labor in Antigua and the Minor Colonies. The last eleven chapters are devoted to Jamaica; its Past and Present Times; a Tour through the Island; the Middle and

Laboring Classes; Free and Slave Labor; Want of Labor; Necessity for Immigration.

3. *The Laws of Business for Business Men, in all the States of the Union, with forms for Mercantile Instruments, &c., &c.* By THEOPHILUS PARSONS, LL. D., Professor of Law in the University of Cambridge. LITTLE, BROWN & Co., of Boston.

The interests of every business man or holder of property in a civilized community are affected by the laws enacted by that community; and from the time of the feudal ages down, business connections have been multiplying and property becoming annually more diffused, step by step, with the progress of society. The law to protect rights meets the operator at every turn, and the necessity, as well as the desire, to know something of the general principles of law, have become more urgent. An eminent English lawyer has said that it is astonishing within how small a space all the principles of commercial law may be compacted. Acting on these data, Mr. PARSONS has compiled a book which, with a moderate application of time and intelligence, will place within the reach of every man a good knowledge of law principles. It is provided with an index that makes possible a ready recurring to the principles of law applicable to every transaction that may arise in business. It is, therefore, not only an exceedingly useful work, but one of highest authority.

4. *A Practical Treatise on the Revenue Laws of the United States.* By C. C. ANDREWS. LITTLE & BROWN, Boston.

This volume is intended, by its able author, to elucidate those obscurities in the revenue laws of the United States, of which Mr. Justice STORY long since expressed the complaint of the bar. The whole so-called system of law has been left by Congress in a very imperfect state, without any serious attempt to reconcile contradiction or cure defects. The volume of Mr. ANDREWS goes some way towards supplying the want, and appears to have been executed with much ability.

5. *The Life and Career of Major JOHN ANDRE, Adjutant-General of the British Army in America.* By WINTHROP SARGENT. Boston: TICKNOR & FIELDS.

There has been ever a romantic interest attending the fate of ANDRE, who, young, accomplished, rich and admired, died a felon's death, in accordance with the inexorable martial law which punishes the spy with death. The fate was the more regretted that the arch-traitor escaped by the point of honor that forbade the delivery of ARNOLD, to expiate his crime of treason and the fault of ANDRE. Mr. SARGENT, in the present volume, has brought together all that can be discovered in relation to ANDRE, his family and career; and has, so to speak, "set" the information in a collection of very agreeable gossip of the men and times in which ANDRE moved. The fashions, customs and manners of Philadelphia and New-York during their occupation by the gay officers of Britain, are pleasantly brought before us, throwing an additional interest around the fate of the young officer who, from amidst those scenes, was translated to the gallows, which, claiming a victim, took him in fault of ARNOLD.

6. *The History of England, from the Accession of JAMES II.* By Lord MACAULAY. Vol. 5. Edited by his sister, Lady TREVELYAN, with additional notes. *A sketch of Lord MACAULAY'S Life and Writings.* By S. AUSTIN ALLIBONE; and a complete Index to the entire work. Boston: CROSBY, NICHOLS, LEE & Co.

This volume contains that portion of the continuation of the "History of England" which was revised by Lord MACAULAY. It is given precisely as he left it, and is the last thought of the great mind as it passed away, untouched by any other hand. From the notes left by him an account of the death of WILLIAM has been arranged and added to, while kept distinct from the work of MACAULAY. The life of MACAULAY, by ALLIBONE, was in the possession of the former for more than a year before his death, and it received the stamp of accuracy. The account of the death and its effect upon the public has been added.

7. *What we Eat. An account of the most common adulterations of Food and Drink, with simple tests by which many of them may be detected.* By THOMAS H. HOSKINS, M. D. 12mo. pp. 218. Boston: T. O. H. P. BURNHAM.

The rapid growth of large cities causes an ever increasing demand upon the food resources of the country, tending to raise the prices at the same moment that the ave-

rage means of purchase among a large proportion of the people diminishes. Hence the temptation to adulterate almost every consumable article offered for sale. This operation has been of old date in European cities, but is comparatively of recent date in this country; nevertheless it has become an evil of great magnitude. The volume before us treats of this subject in most of its phases in an interesting manner. It shows the manner of and the materials with which flour and its manufacture, cocoa, butter, lard, honey, sugar, pepper, spices, confectionery, fruits, meats, fish, liquors of all sorts, &c., &c., are adulterated, to the injury of health and finances. It also points out the tests for detection, and describes the means of avoiding these impositions. To state these facts is to commend the work to the public attention.

8. *Correspondence of FRAULEIN GUNDERODE and BETTINE von Arnim.* 12mo. pp. 344. Boston: T. O. H. P. BURNHAM.

This volume comprises, as its title signifies, the correspondence, in the early part of the century, between GUNDERODE, who was a canoness of one of those convent boarding-schools described by LAMARTINE in his account of his father's courtship, and a young lady, of a wealthy family, who had formerly been an inmate of the convent. The latter subsequently became the friend of GÖTTE. The correspondence has many attractions, not the least of which is the picture it draws of the different spheres of life in which the writers respectively moved.

9. *Annual of Scientific Discovery; or, Year-book of facts in Science and Art for 1861.* By DAVID A. WELLS, A. M., &c. 12mo. pp. 424. Boston: GOULD & LINCOLN.

This welcome volume again makes its appearance, rich with the progress of science and invention during the past year. In every branch of art there are some new and interesting discoveries to record, and the book is supplied with a full and complete analytical index that makes reference to it a matter of little difficulty.

10. *The North American Review, April, 1861.* Boston: CROSBY, NICHOLS, LEE & CO.

The present number, the 191st, well sustains a reputation which has been earned for it successively by its many brilliant writers. It contains an article upon the present difficulties of the country which will attract much attention. There is also an able paper upon explorations in Eastern Africa, a country in which new interest has been excited by the events that have been crowding upon the commercial and political world in the last few years here. Whatever of capacities and resources may be there latent are likely to be drawn out before the existing enterprises shall have been abandoned. There are other attractive papers that will command attention. The subjects of the Review are the following: I. Criminal Procedure. II. SMITH'S Tables of Ecclesiastical History. III. Explorations in Eastern Africa. IV. Documentary History of the Revolution. V. DE GERANDO. VI. Temporal Power of the Church. VII. The Literature of Power. VIII. Slavery, its Origin and Remedy. IX. APPLETON on the Rules of Evidence. X. Travel in Europe. XI. The usual Critical Notices and New Publications.

From the notice of Mr. APPLETON'S work on the *Rules of Evidence*, we gather that the States in which parties are admitted to testify in their own behalf are Maine, Rhode Island, Connecticut and New-York. The States in which interest in the event of a suit does not exclude a witness are Maine, Massachusetts, Rhode Island, Connecticut, New-York, Wisconsin, Indiana, Ohio, California and Alabama. The States in which the rule excluding witnesses on account of religious belief has been modified to a greater or less degree are Maine, New-Hampshire, Massachusetts, Connecticut, Indiana, California and Georgia. The States in which conviction of crime affects credibility and not competency, are Massachusetts, Connecticut, Indiana and Ohio. The common-law rule has been modified in Maine, New-York, and perhaps in other States.

11. *CHAMBERS' Encyclopedia; a Dictionary of Universal Knowledge for the People.* Illustrated with maps and numerous wood engravings. Edinburgh: W. & R. CHAMBERS. Philadelphia: J. B. LIPPINCOTT & Co. Vol. 1, royal octavo, pp. 822, double columns.

This volume embraces subjects from "A." to "BELFAST." It is a work eminently fit for families, embracing articles on several thousand topics, many of which are copiously illustrated. The maps are highly finished, including in this volume only

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ABSTRACT of the Fourteenth Semi-Annual Statement of the condition of the HOME INSURANCE COMPANY, of the City of New-York, on the 1st day of July, 1860:

ASSETS.

Cash Balance in bank,.....	\$55,555 21	Real Estate, No. 4 Wall-street,.....	\$65,650 60
Bonds and Mortgages, (being first lien on real estate worth at least \$1,796 \$ 00).....	238,602 03	Interest due 1st July, 1860, for which \$18,119 31 has since been received,.....	27,986 20
Loans on Stocks, payable on demand, (market value of securities, \$125,253).....	93,414 00	Balance on hands of Agents, and in course of transmission from Agents, on 1st July, (of which \$9,951 65 has since been received).....	60,875 64
Bank Stocks, (market value).....	85,625 01	Bills Receivable, (for Premiums on Inland Risks).....	22,030 18
U. S. Treasury Notes, (market value).....	101,523 00	Premiums due and uncollected on Policies issued at Office,.....	1,057 18
Brooklyn City Water Bonds.....	10,230 00		
N. Carolina State Bonds, (market value).....	9,575 03		
Missouri State Bonds, (market value).....	14,400 03		
Tennessee State Bonds, (market value).....	17,000 00		
Total,.....			\$1,481,819 57

LIABILITIES.

Claims for Losses outstanding on 1st July, 1860,.....	\$54,068 67
J. MILTON SMITH, Secretary.	
JOHN McGER, Assistant Secretary.	
New-York, 19th July, 1860.	
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Stocks of the United States, of New-York, and of New-York City Banks,.....	\$2,557,021 01
Loans secured by Stocks, Bonds and Mortgages, and otherwise,.....	755,310 00
Real Estate,.....	200,000 00
Dividends on Stocks, Interest on Bonds and Mortgages and other Loans, Sundry Notes, Re-insurance, and other claims due the Company, estimated at,.....	315,407 49
Premium Notes and Bills Receivable,.....	2,131,999 58
Cash in Bank,.....	182,794 65
Total amount of Assets,.....	\$4,061,732 67

The whole profits of the Company revert to the Assured, and the profits of each year are divided, upon the Premiums terminated during the year, and for which Certificates are issued, bearing interest until redeemed.

Dividend of Profits declared January, 1860, 35 per cent. \$10,425,470 00

Total Profits for 1859 years,..... 6,619,220 00

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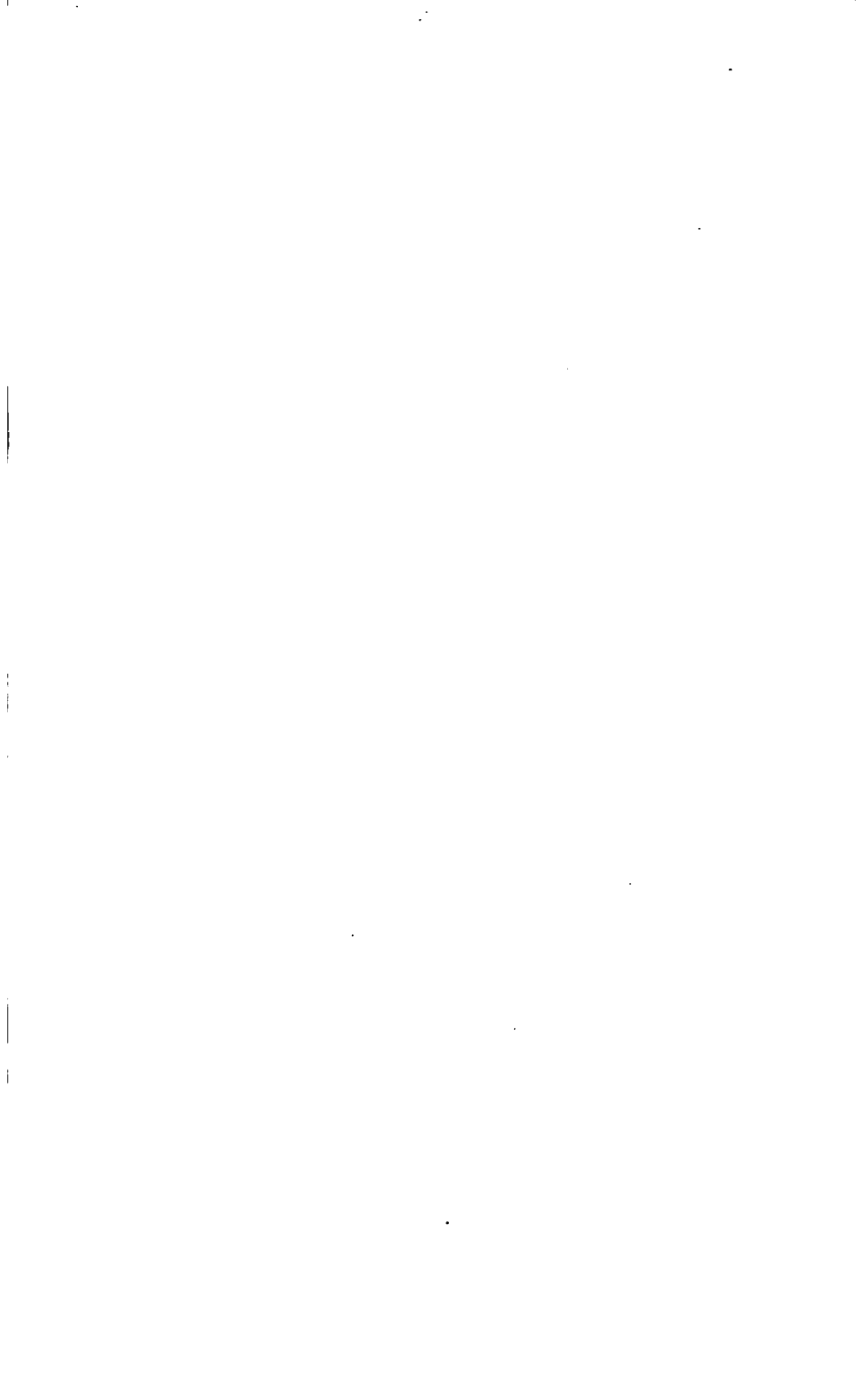
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